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Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once. And take advantage of these important benefits.

Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

Congratulations on your purchase, and welcome to the "family!"



PHILIPS



Dear PHILIPS product owner:

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come. As a member of the PHILIPS "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction. All of this is our way of saying welcome—and thanks for investing in a PHILIPS product.

Sincerely,

A handwritten signature in black ink.

Robert Minkhorst
President and Chief Executive Officer

P.S. Remember, to get the most from your PHILIPS product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!

Know these safety symbols



This "bolt of lightning" indicates uninsulated material within your unit which may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.



The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, and fully insert.

ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

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INTERNET ADDRESS: <http://www.philipsusa.com>

SAFETY INSTRUCTIONS

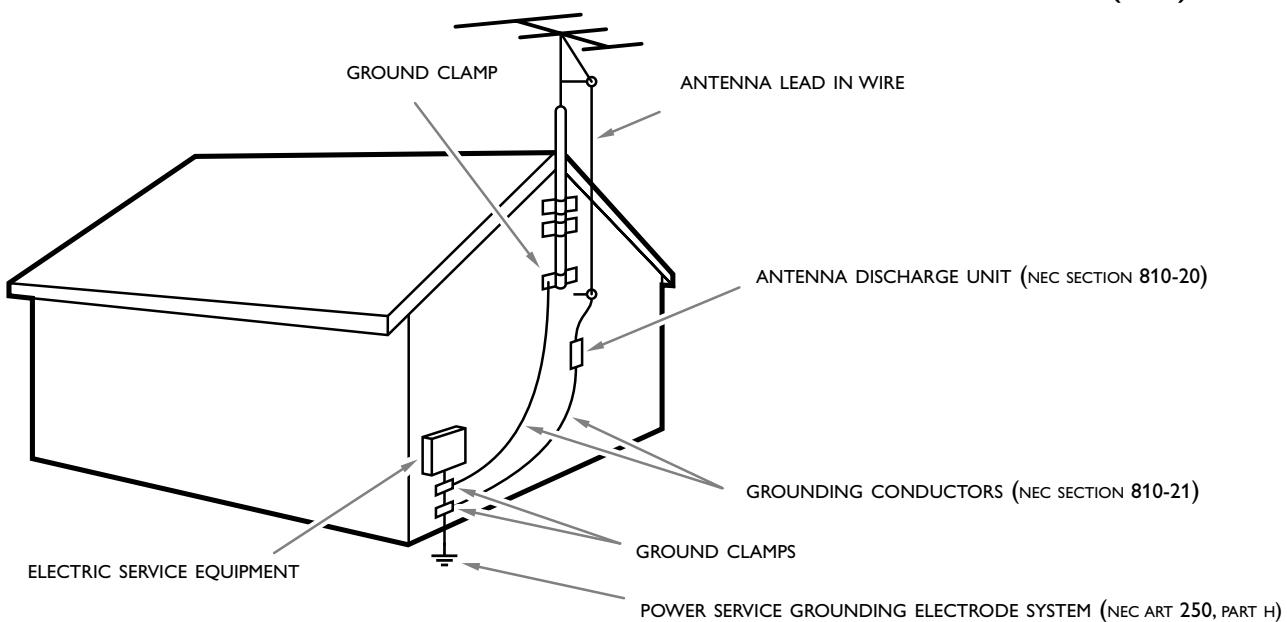
This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Head Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and use instructions should be followed.
5. **Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
6. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
6A.  An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 6B. **Tilt/Stability** - All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.
 - Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
 - Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
7. **Wall or ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

- Read before operating equipment

10. **Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
12. **Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
13. **Power Lines** - An outdoor antenna should be located away from power lines.
14. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No.70-1984, provides information with respect to proper grounding of the mats and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Fig. below.
15. **Non-use Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
16. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
18. **Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE (NEC)



Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

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VCR Plus+®, C3, PlusCode® and GUIDE Plus+™ GOLD are trademarks of Gemstar Development Corporation.

The VCR Plus+ and GUIDE Plus+ systems are manufactured under license from Gemstar Development Corporation and VCR Index Systems B.V., respectively.

A VCR is required for VCR Plus+ operation.

Connect Accessory Devices

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Preparation

Your remote control

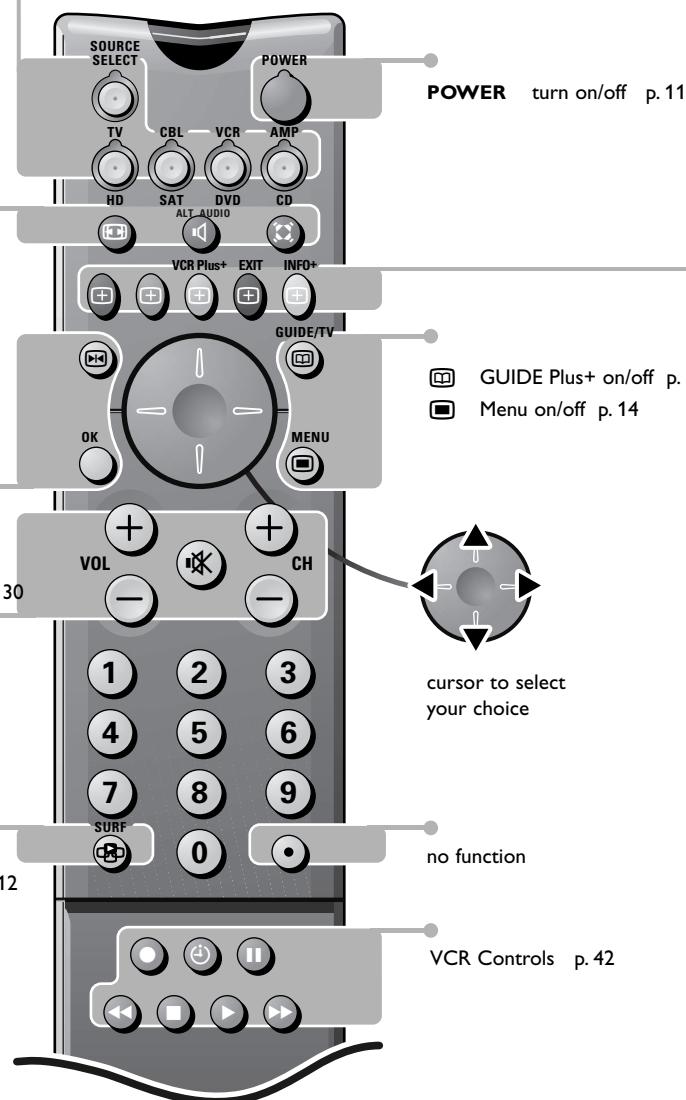
SOURCE SELECT p. 11
selection of **AV1, AV2, AV3, AV4 or SIDE**
Mode buttons p. 11
TV, HD, CBL, SAT, VCR, DVD, AMP or CD selection

Display Format p. 11
 Alternate Audio p. 11
 Sound Mode p. 11

Freeze Format p. 12
OK activate your choice

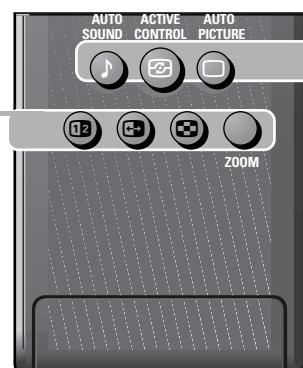
VOL Volume Up/Down p. 12
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CH Channel Up/Down p. 12
GUIDE Plus+ Page Up/Down p. 30

Allows users to browse through pre-defined list of programs p. 12



Dual Screen/Single PIP p. 28
 Switching Screens p. 28
 Multi-PIP p. 29

ZOOM
 Zoom p. 13



Auto Controls

- auto sound p. 12
- active control p. 13
- auto picture p. 12

Preparation

Do not insert the power plug in a wall socket before all connections are made.

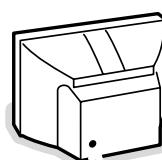
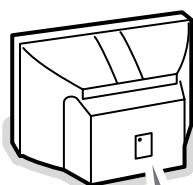
1 Place the TV on a solid surface.

For ventilation, leave at least 2" free all around the TV.

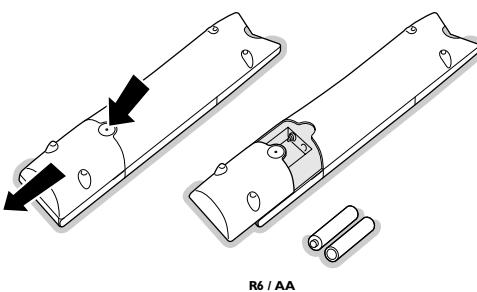
Do not place the TV on a carpet.

To prevent any unsafe situations, do not place any objects on top of the TV.
Avoid heat, direct sunlight and exposure to rain or water.

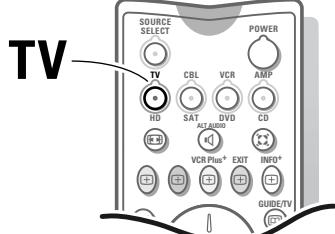
2 Connect a cable TV signal, to the ANT./CABLE jack at the back of the TV. For best picture quality use the suppressor-aerial cable supplied.



ANT. / CABLE



R6 / AA



3 Demo pin

Your new TV is equipped with a Retail Demo Pin inserted in the **IR SHOOTER** connector at the back of the TV.

On the retail floor with the Demo Pin inserted and the TV powered on, the demo about **GUIDE Plus+** is automatically activated.

Remove the demo pin and insert the IR extender supplied into the **IR SHOOTER** connector. (See Connect Accessory Devices, p. 39 to connect your VCR/Cable converter box.)

This disables the Retail Demo feature and allows normal TV operation.

4 Insert the power plug in the wall socket. Refer to the rear of the TV set for the correct operation voltage. Consult your local dealer if your AC power supply is different. To prevent damaging the power (AC) cord which could cause a fire or electric shock, do not place the TV on the cord.

5 Remote Control

Remove the cover of the battery compartment.

Insert the 2 batteries supplied (Type R6-1,5V).

Press the **TV** button to be sure your remote control is in the TV mode.

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas exhausted batteries may not be disposed of with your household waste. Please check on how to dispose of exhausted batteries according to local regulations.

6 Turn the TV on

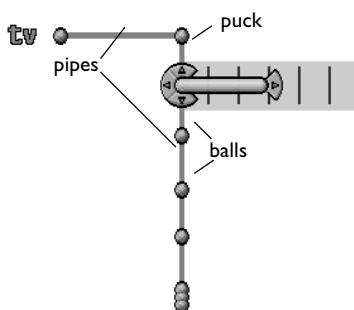
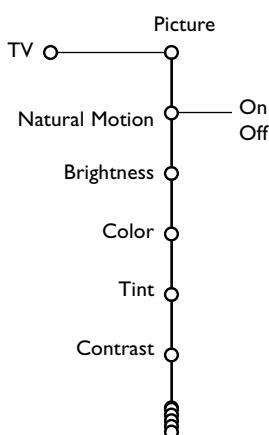
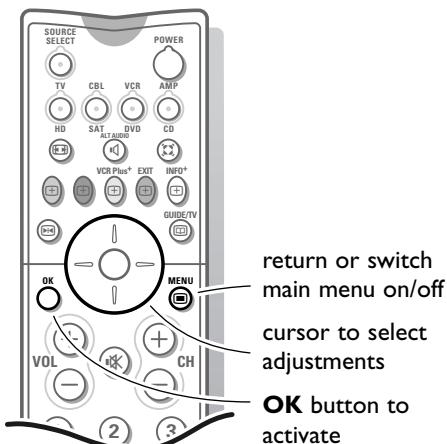
Press the **POWER** switch ① on the front of your TV or press the red power button on the remote control.

A green LED on the front of the TV lights up and the screen comes on.

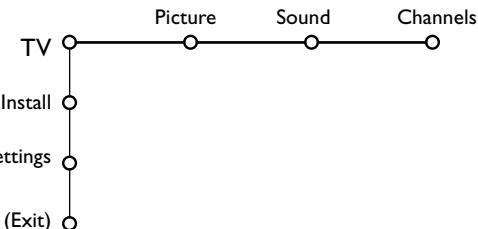
When you switch on your set for the first time, the **Install** menu automatically appears on the screen.

Follow the instructions shown on the screen to guide you through the first time setup and use of your TV.

To use the menus and the menu system



- Press the **MENU** button on the remote control to summon the main menu.



Note: Should your remote control be lost or broken you can still use the buttons on top of the TV. E.g. press the **M** button to summon the main menu.

The **M** button functions both as Menu and OK on the remote control.

The Main menu contains the item **Exit** to dismiss the menu, only when you turn on your TV for the first time, or when the Main menu is summoned with the **M** button on top of the TV.

- Use the cursor in the up/down direction to select the **TV**, **Install** or **Settings** menu.
- Use the cursor in the left/right direction to select the menu item.
- Use the cursor up/down again to select the control you want to select or to adjust. For instance, see Picture menu.
- Press the **MENU** button again to turn off the main menu.

The menu system

Pipes, balls and a puck

The hierarchy of menus and controls is represented by an animated visual mechanism of pipes, balls and a puck.

Unlike a map, however, the animated mechanism constantly shows the current whereabouts, continually expands the view of the immediate neighborhood, and preserves a view of places left behind.

The puck represents the users' point of focus, by surrounding the ball indicating the user's current position in the menu hierarchy.

The puck is always present when the menu system is displayed.

The puck is divided into 4 wedge-shaped regions. They correspond to the directional controls (up/down, left/right) on the remote control.

In this way users can navigate through the menu hierarchy to arrive at the control they wish to adjust.

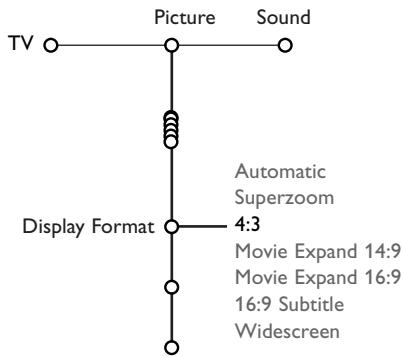
Pressing a valid button on the remote control shifts focus from the current ball to the next one connected by a pipe in that direction.

Balls represent a branch of the menu hierarchy.

All menu items are represented by balls. Each ball is identified with an identifying text label.

When items (balls) of a menu level are more numerous than can fit comfortably on the TV display, only a portion of the items are shown as balls along the pipe. Those omitted are indicated by a cluster of balls which indicates that there are 'more'.

Pipes connect balls together and show the path the user can traverse through the menu structure. Pipes represent individual branches of the menu hierarchy.



Interaction bars

Every pathway in the menu structure leads eventually to a bar, where users can set levels, change values or adjust some aspect of system performance.

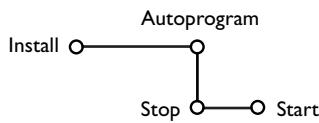
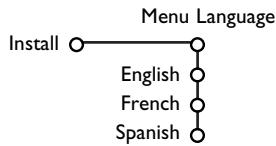
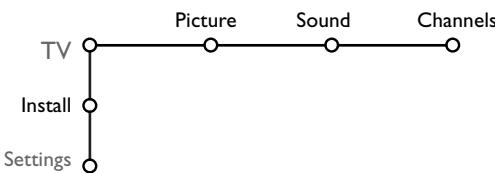
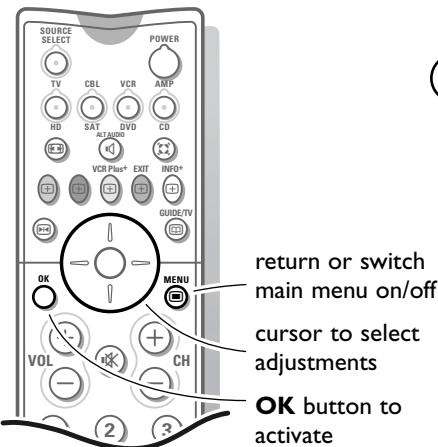
List controls

A list control is used to select one or more items from a list of options. For instance, the Display Format option list with 4:3, Movie Expand 14:9, etc. Press the right button to move the puck into the list. At least one item is the current value and is highlighted as such. Moving the puck up or down with the up/down button causes the list to move down or up. A single-value list allows only one item to be selected at one time and de-selects another. In a multi-value list any number of items can be selected, even allowing more to be selected. They are represented by a checkmark in the box next to the label. E.g. TV Ratings lock.

Confirmation prompt or OK buttons

A confirmation prompt is a puck and ball with a task label on the left and sometimes additional text info on the right.
Press the **OK** button to proceed.

Installation



Select the menu language

- 1 Press the **MENU**  button on the remote control.

When you turn on your TV for the first time and no channels are stored so far, the TV displays a menu nearly identical to the Install menu, but disconnected from the rest of the menu system. This menu also has an additional item **exit** with which the menu can be dismissed.

The menu **Menu Language** automatically appears on the screen. The explanation appears in different languages one at a time next to each language. Choose your preferred language and press the **OK** button on the remote control. Proceed with the Install menu.

- 2 Use the cursor down to select **Install**.
- 3 Use the cursor right to select **Menu Language**.
- 4 Use the cursor up/down to select your preferred language and press the **OK** button to confirm your selection.
- 5 Proceed with the Install menu.

Store TV channels

- 1 Select **Autoprogram** in the Install menu.

- 2 Press the cursor down.

The autoprogramming option label **Start** appears.

- 3 Press the cursor right.

Note: All channels must be unlocked in order to autoprogram. If requested, enter your PIN code to unlock all channels. (See **Channels** in the TV menu, p. 17.)

- 4 The message **Searching** appears and the progress of autoprogramming is displayed.

When Autoprogramming is complete, the puck navigates to **Stop**. A message appears confirming the completion together with the total number of channels found.

Note: When you navigate to **Stop** before autoprogramming is complete, you are given the option to continue.

Available channels: with cable: max. from 1 to 125
off air: max. from 2 to 69

Note: In case a particular channel is too weak for the autoprogramming to identify, after installation is complete, you should tune to that channel by using the digit keys on the remote control. The TV will then add the channel to the master channel map and it will be in your television's memory.

If the channel is not acquired, a message will appear that the channel is not available.

- 5 Proceed with the Install menu.

Set up GUIDE Plus+



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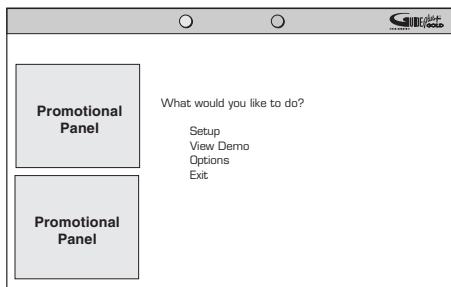
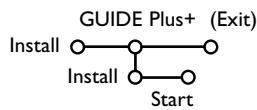
GUIDE Plus+™GOLD is an electronic listing of current and future programs available for your television viewing.

The GUIDE Plus+ system is designed to provide an on screen interactive program guide for you.

GUIDE Plus+ information is received automatically by your TV through your Antenna or Cable TV system connections.

Once you have completed the GUIDE Plus+ Setup procedure, daily updates to the GUIDE Plus+ program data and schedules will take place.

Note: in order to receive the most recent and accurate GUIDE Plus+ system program information, your TV must be turned off but remain plugged in (typically overnight). Be aware that when the TV is powered on during data acquisition (for instance with the OnTimer), the updating of program information is interrupted. All displays and information contained in the GUIDE Plus+ system are in English.



1 Navigate to **GUIDE Plus+** in the Install menu.

2 Select **Install** and navigate to **Start** with the cursor right.

Note: If you do not wish to setup GUIDE Plus+, press OK on the remote control.

Note that some features and GUIDE Plus+ functions will not be available if you do not setup GUIDE Plus+.

A GUIDE Plus+ window is displayed asking you what you would like to do.

3 Select with cursor up/down either Setup,View Demo, Options or Exit.

When **View Demo** is selected, press the **OK** button, and an interactive on screen demonstration will start, highlighting all its major features.

This is an excellent way to review and study the operation of this electronic 'Program Guide'.

When **Options** is selected, you will be requested to choose between **Auto Display On** or **Off**.

When **Auto Display On** is selected, the GUIDE Plus+ system screen will appear every time the TV is turned on with the remote control.

When **Off** is selected, the last channel you were watching after power off will appear when you power on again, and you will have to press the GUIDE Plus+ button on the remote control to access the GUIDE Plus+ Program grid.

When **Exit** is selected, the GUIDE Plus+ Install menu is removed.

When **Setup** is selected, follow the instructions on screen and confirm, where necessary, with the **OK** button. (Referred to as the Select button in the GUIDE Plus+ info screen.)

You will be asked some simple questions to make sure you receive the correct program information: Where you live? To enter your local ZIP or Postal code. If you have cable, a cable box, a VCR...

Use the Setup procedure that matches your Antenna/Cable signal and accessory devices.

- In case of antenna or cable signal with VCR and/or Cable Converter box:
When requested, select **No** if you use an antenna; select **Yes** if you have a cable signal. Press **OK** to continue.
When requested, scroll through the brand name selections of cable boxes using the cursor up/down to select your brand of cable box.
If your cable box did not change to channel 09, select **No** and try again. The GUIDE Plus+ system will try the next code for your brand.
- In case you have a VCR connected:
Tune your VCR to channel 02, then turn it off.
Select your VCR brand from the list you can scroll through.
If your VCR does not switch back on to channel 02, try again until the correct code is found.

④ When the Setup is complete, the TV menu returns confirming that GUIDE Plus+ has been installed.

After the TV is powered off overnight, the download of program information will be received and you should be able to enjoy the benefits of GUIDE Plus+ system the next day.

To operate GUIDE Plus+, see GUIDE Plus+ operation, p. 30.

Operation

Use of the remote control

Source Select

Press this button repeatedly to select **AV1, AV2, AV3, AV4** or **SIDE** when in TV mode, according to where you connected the peripherals (p. 42).

TV CBL VCR AMP HD SAT DVD CD

Press one of these buttons to use the remote control in the TV, CBL, VCR or Amplifier mode as indicated above the button. A green indicator lights up. Press the same button again more than 1 second to use the remote control in the mode indicated below the button (HD, satellite, DVD or CD). A red indicator lights up.

Press the button again to return to the function named above the button.

Display Format

Press this button to summon a list of **available** display formats for showing video images in the traditional 4:3 proportions.

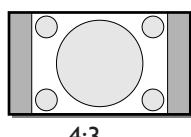
Press this button repeatedly or press the cursor up/down to select another display format: Automatic, Superzoom, 4:3, Movie Expand 14:9, Movie Expand 16:9, 16:9 Subtitle, Widescreen.

Automatic makes the picture fill the screen as much as possible.

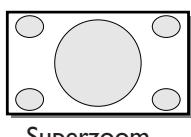
Superzoom removes the black bars on the sides of 4:3 programs with minimal distortion.

When in Movie Expand 14:9, 16:9 or Superzoom display format, you can make subtitles visible with the cursor up/down.

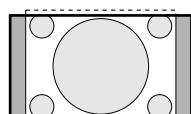
Note: Sometimes VCRs or TV programs carry special signals which will automatically switch the TV to the correct display format.



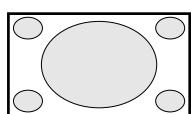
4:3



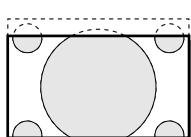
Superzoom



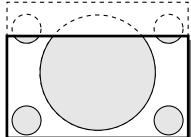
Movie Expand 14:9



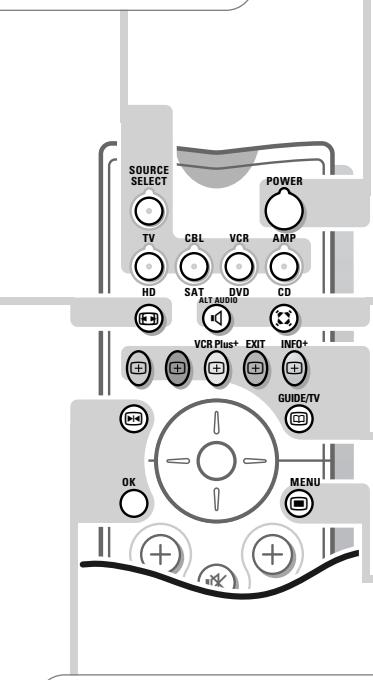
Widescreen



Movie Expand 16:9



16:9 Subtitle



POWER

Press to turn on/off the TV.

The TV is never powered off completely unless it is physically unplugged.

Sound Mode

Press this button to summon a list of available sound modes: Pro Logic, 3D Surround, 3 Stereo, Stereo or Hall. See p. 15.

ALT AUDIO

When you tune a channel where SAP (Second Audio Program) is available, you can toggle between **Main** and **SAP**. If not available, only Main can be selected.

GUIDE Plus+ on/off see p. 30

Main menu on/off see p. 14

Freeze Format

See Settings menu, General, Freeze format, p. 24 where you can select among three modes to be displayed when the freeze button is pressed on the remote control: Freeze, Replay, Photo Finish.

When the mode is **Freeze**: press the button to activate/de-activate a frozen picture. The audio continues to play.

When the mode is **Replay**: press the button to re-display a few seconds of stored video in a single PIP window. Press the **OK** button to display a few seconds of a new stored video picture.

When the mode is **Photo Finish**: press the button to display 12 PIP windows of stored video pictures. Press the **OK** button to display a new series of frozen pictures.

Note: Continuing to hold the button down will cycle the TV through the various modes (Freeze, Replay, Photo Finish).

OK Press this button to activate your choice or to confirm when in the menus.

VOL Volume

Press + or - to adjust the volume.

Mute

Temporarily interrupt the sound or restore it.

CH Channel selection

To browse through the TV channels or sources stored.

Surf

With this feature you can easily switch between different TV channels/sources that currently interest you.

In the menu system, you can set surf to two- or nine-channel.(See Settings, General Surf, p. 23.)

Press this button to select the previously viewed TV channel or source in case of a Two channel surf, or to select the surf ring in case of a Nine channel surf.

In case of a Nine channel surf, a list appears at the right side of the screen. On top, the most recently added. The puck is on the channel number currently viewed.

Press the  button to turn to the next channel in the list or press cursor up/down to immediately select the desired TV channel of the list.

To add a new channel or source: tune to the channel or source you wish to add.

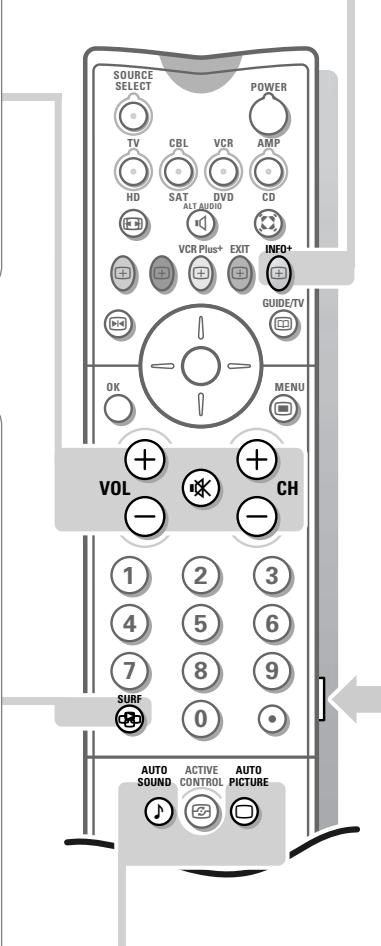
Press the  button. Press the cursor right to add.

If there are already nine channels/sources in the list, the one at the bottom of the list will be removed.

To remove a channel or source: select the channel number you want to remove.

Press the cursor right to remove.

Press the **OK** button or wait for the time out to dismiss the Surf display.



INFO + Display information

Press this button to display (when available) information about the current channel and program or source.

The information display is divided in two zones.

The upper zone presents the time and information on the current program: number, name, video and audio formats of the incoming signal, CC availability, availability of alternate or secondary audio programs (a plus sign

11 | WPIX | 12:47

4:3 | Stereo

(cc) | SAP

TV-PG-DLSV

Kids with Guns

Widescreen

Surround

05:22

appears if you have more than one choice), ratings and program title if available. The lower zone presents information about the currently selected settings: display format, sound mode and (if on) the sleep timer icon and the minutes remaining.

Note: When in GUIDE Plus+ mode, the INFO+ button has a GUIDE Plus+ function.(See p. 30.)

Backlighting button

Press this button on the right side of the remote control. The backlighting of the buttons **VOL**, **CH**,  and the digit buttons stays on for 5 seconds after pressing the button.

Auto Buttons

To select predefined picture and sound settings.

Auto Sound

Press this button to show a list of predefined sound settings, each corresponding with specific factory settings of treble and bass. You can also use the cursor up/down.

Auto Picture

Press this button to show a list of predefined picture settings, each corresponding with specific factory settings of Contrast, Color, Sharpness, Dynamic Contrast and Color enhancement. You can also use the cursor up/down.

Personal refers to the personal preference settings of picture and sound selected in the picture and sound menu.

Remark: the moment you are in a predefined auto sound or picture setting and you modify a setting in the picture or sound menu, all values of the menu will overwrite the previously made personal settings.

Active Control

Active Control is a pro-active and automatic system. The TV continuously measures and corrects all incoming signals in order to provide the best picture possible. Thanks to the Ambient Light Sensor which measures the light conditions of the room in which the TV is situated, the contrast, dynamic contrast, brightness and color picture settings are adjusted automatically. The light sensor is active when the Active Control function is switched to Medium or Maximum.

Press the  button repeatedly to show the Active Control menu with values Off, Minimum, Medium or Maximum.

Off Sharpness and Dynamic Contrast are controlled automatically

Minimum Sharpness, Dynamic Contrast and Noise Reduction are controlled automatically.

Medium Dynamic Contrast, Color, Sharpness and Noise reduction are controlled automatically.

Maximum Contrast, Dynamic Contrast, Color, Sharpness and Noise reduction are controlled automatically.

Press the cursor in the right directions while the selected Active Control setting information is on top of the screen.

The Active Control Demo appears.

The picture settings are being adapted continuously and automatically.

The Demo items cannot be selected.

The sliders will be moving, showing how the TV is tweaking the current picture and dependent of the selected Auto Picture setting which is displayed above the sliders.

None of the sliders is user controllable.

Press the **OK** button to switch off the Demo.

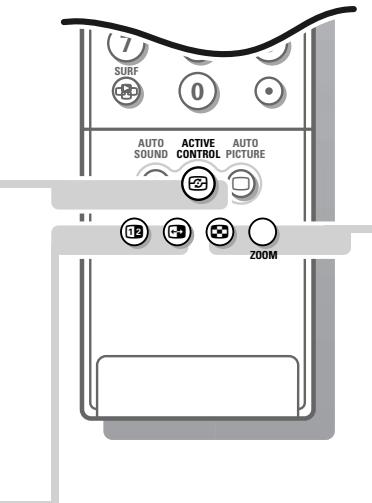
Note: Active Control is not available for digital signals via AV4.

Dual Screen/PIP on/off

See Settings, General menu, p. 23 and Dual Screen/PIP, p. 28

Switching screens in Dual Screen or PIP

See Settings, General menu, p. 23 and Dual Screen/PIP, p. 28



Multi-PIP

Press  to turn on/off Multi-PIP.

The Multi-PIP format that launches on the button press is determined by the selection you made in the Multi-PIP Format list in the General menu, see Settings, General, p. 24 and Multi-PIP Format, p. 29.

Note: Continuing to hold the  button down will cycle the TV through the various formats (PIP3, PIP8, PIP12), launching a new format after each second the button is held down.

Press the  button again to return to a full main screen picture.

ZOOM

Press the **ZOOM**  button to activate the zoom function.

Press the **OK** button repeatedly to select one of the zoom magnifications ($\times 1$, $\times 4$, $\times 9$, $\times 16$).

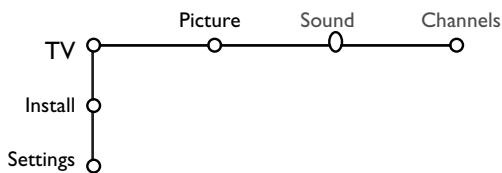
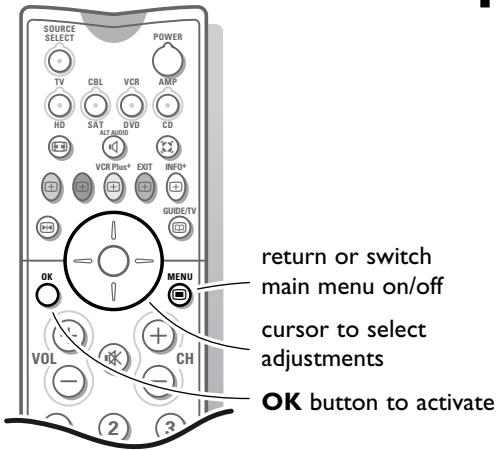
Additionally you can shift the selected zoom window over the screen with the cursor buttons up/down, left/right or in a diagonal way.

The zoom window is reset after selecting another TV channel, another display format or when another display format is selected automatically.

Zooming is disabled in Dual Screen mode.

Press the **ZOOM**  button again to deactivate the zoom function.

Operation



Press the **MENU** button on the remote control to summon the main menu.

Note: When the main menu is accessed from the keypad on top of the TV, it has an additional **Exit** item, which lets you dismiss the menu.

TV menu

Picture menu

Select the menu item with the cursor up/down and adjust the settings with the cursor left/right.

Natural Motion (not available for digital signals via AV4)

When Natural Motion is set to **On**, the TV displays video in progressive scan mode with motion compensation. It reduces line flicker, doubles vertical picture resolution and reproduces movement smooth and sharp.

When natural motion is set to **Off** the TV displays video in interlaced mode without motion compensation. It reduces line flicker.

*Note: natural motion will always be (re)set to **On** after you switch the set on.*

Brightness

This control allows you to adjust the brightness levels of the picture.

Color

This control allows you to adjust the color saturation of the picture.

Tint (not available for digital signals via AV4)

This control allows you to adjust the color mix (hue) of the picture.

Contrast

This control allows you to adjust the contrast levels of the picture.

Dynamic Contrast (not available for digital signals via AV4)

This feature automatically makes the contrast in the darker and the brighter picture areas more noticeable as the image on screen changes.

Normally, select **Medium**. In certain circumstances it may be preferred to select **Minimum**, **Maximum** or **Off**.

- 1 Press the cursor right to enter the list.
- 2 Select one of the settings with the cursor up/down.
- 3 Press the cursor left or the **OK** button to return to the picture menu.

Sharpness (not available for digital signals via AV4)

This control allows you to adjust the edge definition of a picture.

Color temperature

This control allows you to select from TV channels, the color temperature of the TV picture.

- 1 Press the cursor right to enter the list.
- 2 Select **Normal**, **Warm** or **Cool** with the cursor up/down.
- 3 Press the cursor left or the **OK** button to return to the picture menu.

DNR (Digital Noise Reduction) (not available for digital signals via AV4)

This feature automatically filters out and reduces the image noise and improves picture quality when receiving weak analog video signals.

- 1 Press the cursor right to enter the list.
- 2 Select **Off**, **Minimum**, **Medium** or **Maximum** according to the image noise present, with the cursor up/down.
- 3 Press the cursor left or the **OK** button to return to the picture menu.



Display Format (not selectable for digital signals via AV4)

This menu item performs the same as the button on the Remote Control. See Use of the Remote Control, p. 11

Color Enhancement (not available for digital signals via AV4)

When activated, this feature automatically controls skintone correction, green enhancement and blue stretch. It makes the colors more vivid.

- 1 Press the cursor right to enter the list.
- 2 Select **On** or **Off** in order to activate/de-activate Color Enhancement with the cursor up/down.
- 3 Press the cursor left or the **OK** button to return to the picture menu.

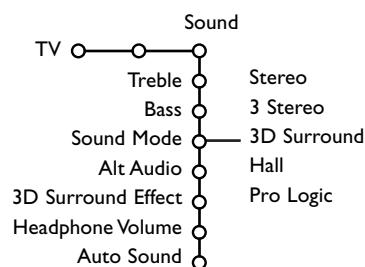
Auto Picture

This menu item performs the same as the **Auto Picture** item on the remote control. See Use of the Remote Control, p. 12.

- 1 Press the cursor right to enter the list.
- 2 Select a predefined picture setting with the cursor up/down.
- 3 Press the cursor left to return to the picture menu.

To exit the picture menu branch, press the diagonal cursor button upright or up/left or press the menu button.

Note: the picture menu settings for AV4 are independent of the normal menu settings.



Sound menu

Select the menu items with the cursor up/down and adjust the settings with the cursor left/right.

Remember, control settings are at normal mid-range levels when the bar scale is centered.

Treble

Treble attenuates or amplifies the high-frequency response of the audio output signal.

Bass

Bass attenuates or amplifies the low-frequency response of the audio output signal.

Sound Mode

The Sound mode feature allows you to select the way that your TV plays audio that it receives from broadcast signals or from external inputs.

Each mode plays the audio in different configurations, depending on the speaker configuration and the sound signal being broadcast. The graphical representation of the TV speakers is displayed and updated according to the selected Sound Mode. Speakers which are active are highlighted.

Refer to the Main Menu, Settings, Speakers menu, see p. 21 for the settings of the speaker-related controls, and to Connect Accessory Devices, Connect external speakers, p. 40 for the speaker configuration.



* Dolby 'Pro Logic' and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
Manufactured under license from Dolby Laboratories Licensing Corporation.

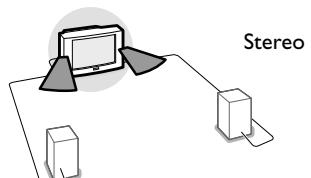
In order to receive the full reproduction capability of true Dolby Pro Logic* Sound you should include the proper use and arrangement of surround speakers (16 Ohm only!) (not supplied).

When item Surround speakers in the speakers menu is set to **No**, the Sound Modes Hall and Pro Logic are grayed out and can not be selected.

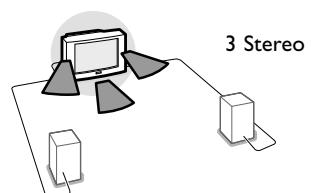
1 Select **Sound Mode** with the cursor up/down.

2 Enter the list of Sound modes with the cursor right.
As you select an item of the list, a graphic appears to the right, illustrating the speakers configuration. The illustration is updated according to the chosen speaker setup and the selected sound mode.

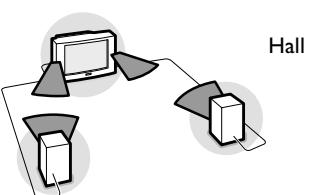
3 Select the sound mode according to the sound signal being broadcast.



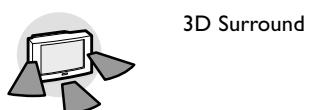
Stereo



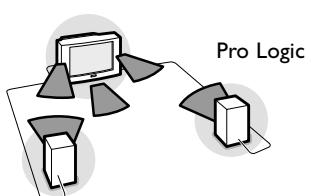
3 Stereo



Hall



3D Surround



Pro Logic

Stereo

This mode reproduces only the left and right front sound signals.
You only hear a stereo sound if the broadcast which you are receiving is transmitted in stereo.

3 Stereo

The sound signal is now distributed over the front left, the front right and the center TV speakers.
The rear speakers do not produce any signal.

Hall

The special sound signal is distributed over the rear speakers which creates a hall effect from the rear.
The center speaker does not reproduce any signal.
This mode is recommended when you wish to add surround sound to a broadcast which is not encoded Dolby Surround or to a mono signal.

3D Surround

3D Surround enables you to experience the effect of Dolby Surround Pro Logic without the need of having rear speakers connected or activated.
Select the level of 3D Surround Effect in the Sound menu.

Pro Logic (with Dolby Surround broadcasting)

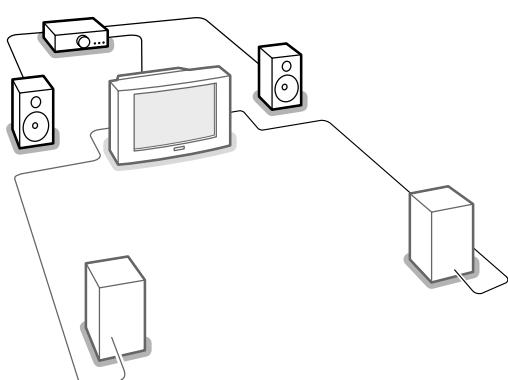
In addition to the left and right internal speakers, the center and the rear surround speakers reproduce the Dolby Surround Pro Logic sounds.
This 4-channel sound is always present in the movie or program marked with Dolby Surround.
This mode is especially recommended for such programs or movies.

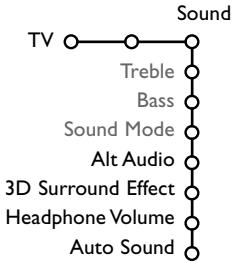
With two extra front speakers connected

To enhance the sound reproduction of your TV you may connect two extra front speakers via an external amplifier. (See Connect Accessory Devices, External speakers/Amplifier, p. 40.)

In the Sound modes, Hall and Stereo the internal TV speakers do not produce any sound if your amplifier is turned off.

Note: If extra front speakers are connected and Center Mode Yes is selected in the Speakers menu, all internal TV speakers produce center sound in the surround modes Pro Logic, 3 Stereo and 3D Surround.





Alt Audio

When you tune a channel where SAP (Second Audio Program) is available, you can toggle between **Main** and **SAP**. Press the cursor right to enter the list and make your preferred audio language with the cursor up/down. If SAP is not available, only Main is selected.

3D Surround Effect

When you have selected 3D Surround as Sound mode, the menu item **3D Surround Effect** appears in which the level of the 3D effect can be selected: **Maximum**, **Medium**, **Minimum** or **Off**.

Headphone Volume

See Connect Accessory Devices, p. 39 for the connection of the headphone.

Auto Sound

This menu item performs the same as the Auto Sound item on the remote control. See Use of the Remote Control, p. 12.

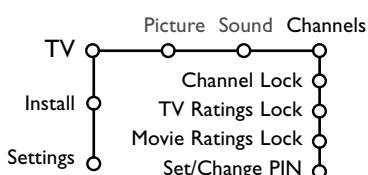
- ① Press the cursor right to enter the list.
- ② Select a predefined sound setting with the cursor up/down.
- ③ Press the cursor left to return to the sound menu.

To exit the sound menu branch, press the diagonal cursor button upright, upleft, downright or downleft or press the menu button.

Channels menu

Channel Lock

This feature provides the ability to prevent the viewing of a selected channel. Blocked channels can still be tuned with the digit buttons only, but the picture is blanked and the audio is muted.



- ① Select **Channel Lock** with the cursor down.

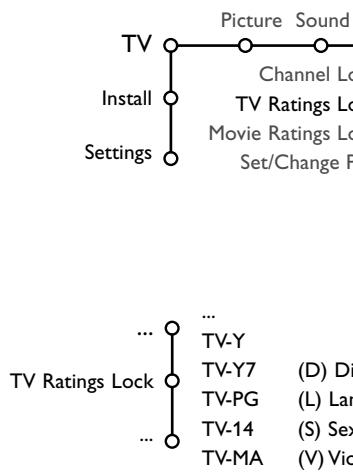
② Press the cursor right.
A list with all stored channel numbers appears.

- ③ Select the channel you want to lock/unlock with the cursor down.
- ④ Press **OK**.

This summons a message that prompts you to enter your PIN. (See Set/Change Pin below.) Follow the instructions on screen. If the PIN is correct, the channel list reappears, and the color of the box-graphic of the selected channel changes from blue to yellow to indicate the channel is currently locked.

You only have to enter your PIN code once while the menu is active.

- ⑤ Repeat to lock other channels.



Age-based Rating	Content-based Rating
All	none
No Rating	none
TV-Y	none
TV-Y7	(FV) Fantasy Violence
TV-G	none
TV-PG	(D) Dialog (L) Language (S) Sex (V) Violence
TV-PG-14	(D) Dialog (L) Language (S) Sex (V) Violence
TV-MA	(L) Language (S) Sex (V) Violence

TV Ratings Lock

Your TV is equipped with a V-chip. This allows you to control access to individual programs based on their movie and TV ratings. All settings apply to all AV inputs, TV and external sources.

The program content advisory data are sent by the broadcaster or program provider.

- 1** Select **TV Ratings Lock** with the cursor down.
A list appears, showing the age-based TV ratings and a corresponding content-based ratings list.
- 2** Press the cursor right to enter the list.
- 3** Select an age-based TV rating with the cursor up/down, and enter, if present, the list with content-based ratings with the cursor right, and select one content-based rating.
- 4** Press **OK** to activate/de-activate the selected rating.
You are asked to enter your PIN. (See Set/Change PIN below.)
If the PIN is correct, the TV Ratings Lock menu reappears.
- 5** Select another content-based rating if you like and press **OK** again.
You need only enter your PIN once while the menu is active. You can lock/unlock any number of ratings on the list without re-entering your PIN.

Each ratings item has a box-graphic in front of it to indicate whether or not programs carrying that rating are currently locked:

- a yellow-colored box: all items in the contents-based list are locked as well;
- a blue-colored box: the item is unselected;
- a half blue, half yellow-colored box: some content-based ratings are selected/unselected.

When **All** has been selected, all items in the age-based and in the contents-based lists are locked.

If, while **All** is selected, any other item, either an age-based or content-based item, is unselected, then **All** is automatically unselected.

No Rating is the selection for items that either have no rating information or have a rating of None. When this is selected, programs without a rating will be locked.

When an item on the age-based list is selected, all items below that item of the same group are locked as well.

When you select a content-based rating, all identical content-based ratings in the younger age-based categories are also selected.

TV-Y appropriate for children of all ages with themes and elements

suitable for children aged 2-6

TV-Y7 programs designed for children

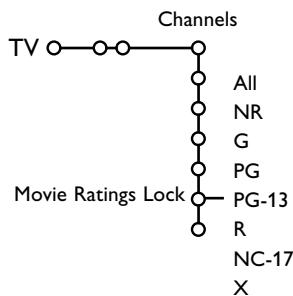
TV-Y7-FV programs include fantasy violence more intense than other programs in the TV-Y7 category

TV-G programs suitable for all ages. These programs contain little or no violence, no strong language and little or no sexual dialogue or situations

TV-PG programs contain elements that some parents may find unsuitable for younger children and which may need parental guidance. The program may contain moderate violence, sexual dialogue and/or situations and some strong language.

TV-14 programs contain elements that may not be suitable for children under 14 years of age. These programs include one or more of the following: intense violence, intense sexual situations, suggestive dialogue and strong language.

TV-MA programs are designed to be viewed by adults and may be unsuitable for children under the age of 17.
These programs may contain graphic violence, explicit sexual activity and/or crude or indecent language.



Movie Ratings Lock

This function allows you to control access to individual movies based on their MPAA ratings (Motion Picture Association of America).

- 1 Select **Movie Ratings Lock** with the cursor down.
A list appears, showing all valid MPAA content ratings.
- 2 Press the cursor right to enter the list.
- 3 Select a movie rating with the cursor up/down.
- 4 Press **OK** to activate/de-activate the selected rating.
You are asked to enter your PIN. (See Set/Change PIN below.)
If the PIN is correct, the Movie Ratings Lock menu reappears.

Each rating item has a box-graphic in front of it to indicate whether or not programs carrying that rating are currently locked:

- a yellow-colored box: movies with this rating are locked;
- a blue-colored box: movies with this rating are unlocked.

When **All** has been selected, all items on the movie ratings list become selected. (All movies are locked.)

If, while **All** is selected, any other item is unselected, then **All** is automatically unselected.

When **NR** has been selected, no other item is selected.

When any other item has been selected, all ratings below are selected as well, thus all movies with those ratings will be locked.

NR	not rated
G	movies with a mild content, suitable for all ages
PG	movies for which parental guidance is recommended. They may contain a few racy or violent scenes or maybe some bad language
PG-13	movies for which parental guidance may be recommended if under age 13
R	restricted. The movies usually contain offensive sex or bad language and may be unsuitable for children under the age of 17. Parental guidance or permission needed.
NC-17	even with parental permission, forbidden under age 17. More offensive sex, violence or bad language.
X	movies which generally focus on sex, violence and/or bad language. Also known as pornography.

Set/Change PIN

This function allows you to create or change a Personal Identification Number (PIN) in the menu.

- ① Select **Set** or **Change PIN** with the cursor down.
- ② If no PIN exists yet, the menu item is set to **Set PIN**. Follow the instructions on screen.
If a PIN has previously been entered, the menu item is set to **Change PIN**.
Follow the instructions on screen.
All number combinations from 0000 to 9999 are valid numbers.
- ③ The Channels menu reappears with a message confirming that the PIN has been created.

Important: You have forgotten your PIN !

- ① Select **Change PIN** in the Channels menu.
- ② Press **OK**.
- ③ Press the cursor right.
- ④ Enter the overriding code 0-7-1-1.
- ⑤ Press the cursor again and enter a new personal 4-digit PIN code.
The previous PIN is erased and the new PIN is stored.

Note: The overriding PIN code only works in the Change PIN menu.

Settings menu

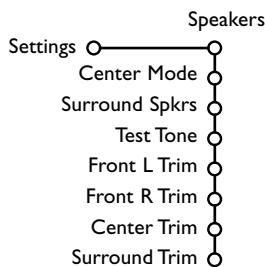


This menu allows you to access to settings that are typically set only once or are changed rarely and which are not related to the installation of the TV channels.

The **Speakers** menu reflects the speaker-related controls.

The **General** menu allows you to change settings that will typically be accessed only occasionally.

The **Source** menu allows you to select a source and/or to name each input source.



Speakers

In order to receive the full reproduction capability of true Dolby Surround Sound you should include the proper use and arrangement of the speakers:

- via the TV and its internal Front Right, Center and Left speakers and two rear surround speakers (16 Ohm only) connected to the back of the TV;
- or via the Variable Line Out connectors and an external Dolby amplifier. See External Speakers/Amplifier, p. 40.

Select the various Speakers menu controls to setup the configuration of the TV's speakers system for Dolby audio playback.

Each trim control can be adjusted to match test tone levels.

Depending on the output mode and sound mode (see Main Menu, TV, Sound, Sound mode, p. 16) selected, some menu items may be grayed out and are not selectable.

Availability of Speaker menu items

Center Mode	•	•	•	•	•
Surround Spkrs				•	•
Test tone	•	•	•	•	•
Front L Trim	•	•	•	•	•
Front R Trim	•	•	•	•	•
Center Trim		•	•	•	•
Surround Trim				•	•

Stereo 3 Stereo 3D Surround Hall Pro Logic

Center Mode

See Connect Accessory Devices, External Speakers, Amplifier, p. 40.

If no External Front Speakers are connected, do not change the predefined factory settings which is **Center Mode No**.

If External Front Speakers are connected, select **Center Mode Yes**.

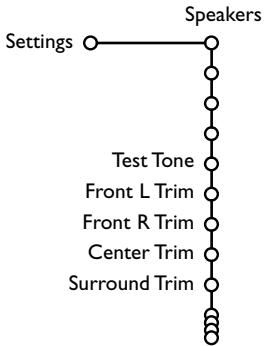
In this setting, the center channel in surround mode is directed to all three internal TV speakers (left, center and right).

Surround Speakers

See Connect Accessory Devices, External Speakers, p. 40.

If no Surround Speakers are connected do not change the predefined factory settings which is **No**.

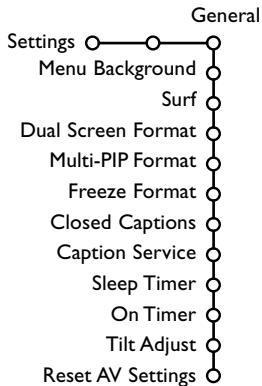
If Surround Speakers are connected select **Yes**.



Test Tone and Trim Controls

The menu item **Test Tone** enables you to have a reference of the speakers loudness and to adjust the level of each until they are balanced in loudness. The speakers activated light up in the screen graphic.

- ① Select **Test tone** with the cursor down.
- ② Press the cursor right.
- ③ Select **On** or **Off** with the cursor up/down.
When turned **On**, the Test Tone control generates a sound test signal that circulates through the individual active speakers in a clockwise direction, and is meant to be used with the adjustable trim controls.
Once turned on, the Test Tone will continue to circulate through the Left, Center, Right and both Rear speakers (if present).
- ④ Press the cursor left.
- ⑤ Press the cursor up/down to select the desired speaker for individual volume level adjustment.
- ⑥ Press the cursor left/right to adjust the trim level.
- ⑦ Continue and select the other speakers for adjustment as desired.
- ⑧ Press the cursor up to return to the **Test Tone** menu item when speaker adjustments are complete and turn the control **Off**.



General

This menu allows you to change various settings that are presumably adjusted less frequently than most other settings.

Menu Background

- ① Select **Menu Background** with the cursor down.
- ② Press the cursor right.
- ③ Select **On** or **Off** to turn the Menu Background on or off.

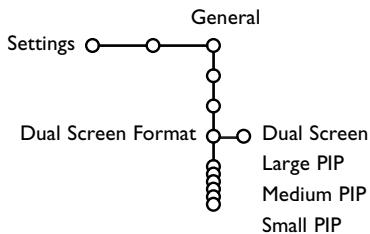
Surf

With this feature you can switch between Two-channel and Nine-channel surf behavior.

- ① Select **Surf** with the cursor down.
- ② Press the cursor right.
- ③ Select **Two Channels** or **Nine Channels** with the cursor up/down.

Select **Two Channels** if you want the surf button to toggle between the current and the previously selected channel.

Select **Nine Channels** if you want the surf button to summon a list of up to 9 channels which can be selected. (See Use of the Remote Control, p. 12.)



Dual Screen Format (not available for digital signals via AV4)

The Dual Screen and Single PIP functions allow you to view two TV channels or sources at one time, hearing audio from the main screen through the speakers and audio from the other screen through the headphones.

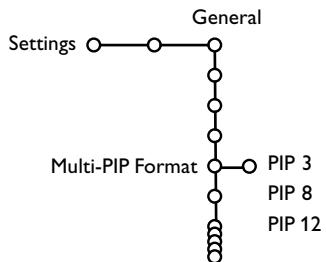
This menu allows you to select the preferred format which can then be displayed toggling the **12** button on and off.

See Dual Screen/PIP, p. 28.

- ① Select **Dual Screen Format** with the cursor down.
- ② Press the cursor right.
- ③ Select **Dual Screen**, **Large PIP**, **Medium PIP** or **Small PIP** with the cursor up/down.

When **Dual Screen** is selected, and Dual Screen mode is activated from the remote control **12** button, the TV splits the screen into two equally sized screens.

When a **PIP mode** is selected, and Dual Screen mode is activated from the remote control **12** button, the TV shows a full screen of video with a small, medium or large window of video on top of it.



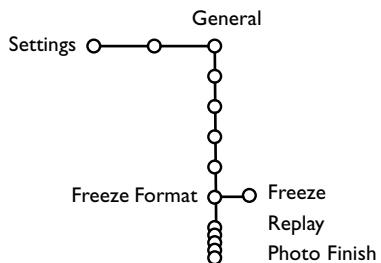
Multi-PIP Format (not available for digital signals via AV4)

Multi-PIP format allows you to view multiple channels or sources at one time, hearing audio from the main screen through the speakers.
In this menu you can select which format you prefer to see in Multi-PIP: PIP 3, PIP 8 or PIP 12, referring to the number of PIP screens being displayed pressing the button on the remote control.

Note: Continuing to hold the button down will also cycle the TV through the various formats.

- ① Select **Multi-PIP Format** with the cursor down.
- ② Press the cursor right.
- ③ Select **PIP 3, PIP 8** or **PIP 12** with the cursor up/down.

See Multi-PIP, p. 29 how to operate.

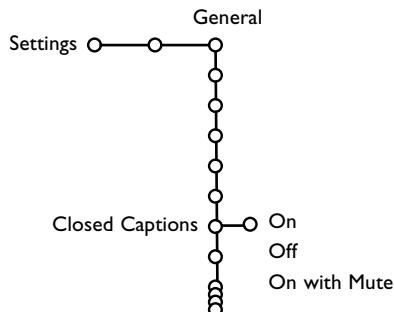


Freeze Format (not available for digital signals via AV4)

Freeze Format allows you to select among three options: Freeze, Replay, Photo Finish, to be activated when you press the button on the remote control. See p. 11.
In this menu you can select which option you prefer.
In Dual Screen or PIP mode, the highlighted screen is frozen, and cycling through the options is not possible.

Note: Continuing to hold the button down will also cycle the TV through the various formats.

- ① Select **Freeze Format** with the cursor down.
- ② Press the cursor right.
- ③ Select **Freeze, Replay, Photo Finish** with the cursor up/down.



Closed Captions

Closed Captioning allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, this feature uses on-screen 'text boxes' to show dialogue and conversations while the TV program is in progress. Captions will appear on the screen during captioned broadcasts.

Note: The captions do not always use correct spelling and grammar. Not all TV programs and product commercials are made for broadcast with Closed Caption information included. Refer to your area's TV program listings for the TV channels and times of Closed Caption shows. The captioned programs are usually noted in the TV listings with service marks such as 'CC'.

- ① Select **Closed Captions** with the cursor down.
- ② Press the cursor right.
- ③ Select **On, Off or On with Mute**.

When **On** is selected, the TV will display the currently displayed Caption Service, assuming that the service is available in the broadcast.

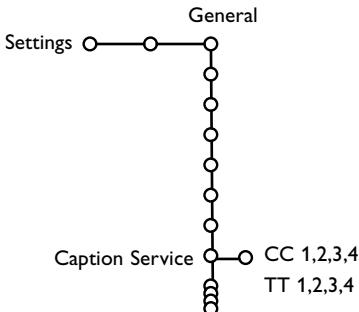
When **Off** is selected, the TV will not display Closed Captions information.

When **On with Mute** is selected, the TV will display the currently selected Caption Service when the mute function is active. When the mute function is not active, the TV will not display Closed captions information.

Note:

- Closed Captioning is disabled when a single PIP format is active;
- When Dual Screen Format is selected, Closed Captioning (if activated) appears for the main screen only, and it covers the full screen;
- When Multi-PIP is activated, Closed Caption is disabled.

Caption Service



- ① Select **Caption Service** with the cursor down.
- ② Press the cursor right.
- ③ Select the desired **Caption Service**

- **CC 1, 2, 3 or 4**

Dialogue (and descriptions) for the action on the captioned TV program shows on screen.

Usually CC 1 is the most used.

CC 2 may be used for alternate languages if they are being transmitted.

- **TT 1, 2, 3 or 4**

Often used for channel guide, schedules, bulletin board information for Closed Caption programs, news, weather informations or stock market reports.

Not all Caption Services are necessarily being used by a TV channel during the transmission of a Closed Caption program.

Note: This television receiver provides display of television closed captioning conforming with the EIA-608 standard and in accordance with Sections 15.119 of the FCC rules.

Sleep Timer

With the Sleep Timer function you can set a time period after which the TV will turn itself off.

- ① Select **Sleep Timer** with the cursor down.
- ② Press the cursor right to set the time.

The counter runs from 0 up to 180 mins (in 5-min increments). When set to 0, the sleep timer is turned off.

One minute before the sleep timer expires, a message appears that the TV will turn off in 60 seconds or you may cancel the sleep timer by pressing the **OK** button. You can always turn off your TV earlier or change the set time.

On Timer

The On Timer function allows you to set a time to power your TV on automatically at a certain time of day. It can be set to work once, or daily at the same time.

The TV will turn on at the channel which was tuned when it was turned off.
Note: The On-Timer is available only after the GUIDE Plus+ has been installed.

- ① Select **On Timer** with the cursor down.
- ② Press the cursor right.
- ③ Select **Once**, **Daily** or **Off** to set the On Timer for one-time operation, daily operation or Off.
- ④ When you have selected **Once** or **Daily**, press the cursor right.
- ⑤ Enter the time with the digit buttons or with cursor up/down. Also enter **AM** (A) or **PM** (P) with the cursor up/down. Invalid digits can not be entered.
- ⑥ Press the **OK** button to return to the On Timer menu item. If a valid hour has been entered, and the minutes are left blank, 00 is automatically entered for the minutes spaces.

Note: If the On Timer has never been set, then the number-entry spaces are dash marks.

If the On Timer has been set at any time previously, then the time last saved is shown, even if the On Timer is set to Off.

Tilt Adjust

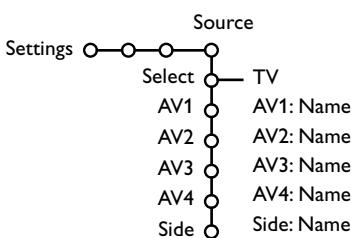
This function allows you, if necessary, to rotate the picture shown on the screen, clockwise or counterclockwise.

- ① Select **Tilt Adjust** with the cursor down.
- ② Press the cursor left or right to adjust the rotation of the picture.

Reset AV Settings

This function allows you to reset most of the picture and sound settings to their predefined factory states.

- ① Select **Reset AV Settings** with the cursor down.
- ② Press **OK** to erase settings and reset them to their default values.



Source

This menu allows you to select and/or name the accessory device you connect to one of the AV inputs.

- ① Select **Source** with the cursor right.
The Source menu items appear.
- ② Press the cursor down to select the menu items..

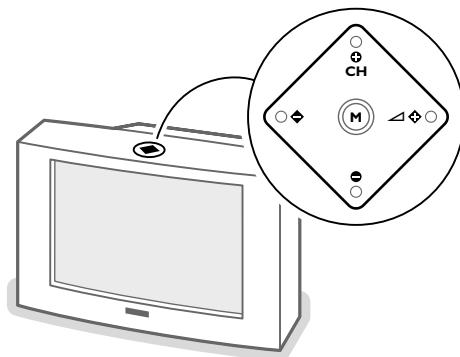
When you select **Select**, a list appears, showing the available sources. Selecting a source causes the TV to begin showing video and playing audio from the selected source.

When you select **AV1, AV2, AV3, AV4** or **SIDE**, a list appears allowing you to identify which type of peripheral is attached to this input.

The TV detects the presence of the connected peripheral and the signal is routed appropriately.

The name selected is automatically added to the source in the Select list.

- ③ Press the menu  button on the remote control to turn off all menus on screen.
- ④ Press the **SOURCE** button on the remote control.
The Source Select menu appears in which you may select a source or peripheral connected to be displayed on screen.



Keypad on top of the TV

Should your Remote Control be temporarily unavailable, or lost or broken, the buttonpad on top of the TV allows you to summon and to navigate the Main Menu, to tune TV channels, and to control the volume.

When the Main Menu is not displayed, the **CH-** or **+** buttons enable you to select the TV channels, the **Δ -** or **+** buttons to adjust the volume.

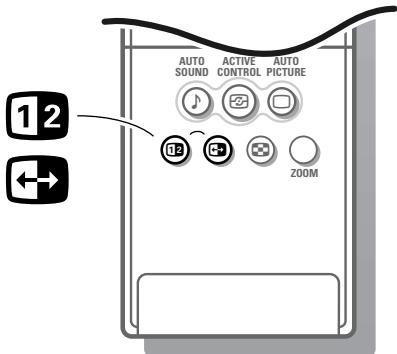
Press the **M** button to summon the Main Menu and to confirm the selection made (same function as the **OK** button)

Press the **Δ -** or **+** buttons to navigate left/right in the menu items.

Press the **CH -** or **+** buttons to navigate up/down in the menus.

Select the **M** button again or navigate to **Exit** to dismiss the Main Menu.

Dual Screen/PIP



Press the **12** button to turn on or off Dual Screen or Single PIP, according to the format selection made in the Dual Screen Format list in the General menu. See Settings, General, p. 23.

Audio from the main screen (the left screen in Dual Screen and the full size screen in single PIP) plays to the speakers;
Audio from the right screen or from the single PIP plays to the headphones.

Note: Continuing to hold the **12** button down will cycle the TV through the various formats (Dual Screen, Large PIP, Medium PIP, Small PIP), launching a new format after each second the button is held down.

Making the PIP screen movable

When a single PIP format is selected, press the **OK** button to make the PIP screen movable.

Press the cursor left/right to move the PIP screen in the direction of the cursor press.

Switching screens

Press the **CH** button to swap the main screen and the auxiliary screen.

On-Screen information

The On-Screen information, which appears when changing channels, always refer to the highlighted screen.

To highlight a screen

Pressing the cursor left/right will toggle the highlight between the main screen and the auxiliary screen.

Change TV channels in main screen, auxiliary screen and PIP screen

Press the channel up/down button, the digit buttons or the **CH** button in order to change the TV channels in the highlighted screen.

Deactivating Dual Screen mode

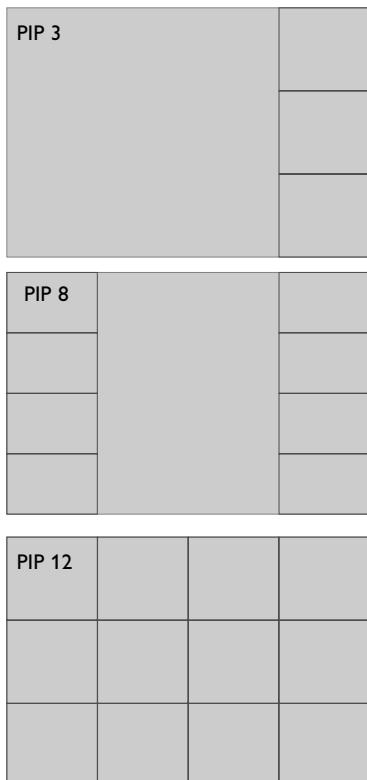
Press the **12** button again to return to a full main screen picture.
The TV tunes to the picture which was highlighted in Dual Screen mode.

Notes:

- **TV or Movie ratings:** When Dual Screen mode is activated, a message with a PIN entry is summoned as TV and Movie ratings locks do not apply in Dual Screen. Select with the cursor button up/down whether you want to suspend V-chip blocking as long as Dual Screen mode is activated, or until the TV is turned off. If **Cancel** is selected, you return to normal TV viewing.
- **Channel Lock:** When Dual Screen mode is activated, and a channel or source is locked, the corresponding screen remains blank;
- **Display formats:** When Single PIP is selected but not highlighted, the Display Format control works normally for the Main Screen only. When Single PIP is highlighted the Display Format control in the menu is grayed and the **FORMAT** button has no effect.
When Dual Screen mode is selected, two Display formats are supported: Full Screen or 4:3 Letterbox (4:3 format with black bars above and below the picture).
- **Dual Screen or Single PIP is not available when a peripheral is selected connected to AV4.**

Multi-PIP

In the Settings menu, General, p. 24 you selected which Multi-PIP format you prefer to see in Multi-PIP.



① Press the **PIP** button on the remote control to toggle the selected format on or off.

Notes:

- *TV or Movie ratings:* when Multi-PIP is activated, a message with a PIN entry is summoned as TV and Movie Ratings locks do not apply in Multi-PIP.
- Select with the cursor button up/down to indicate whether you want to suspend V-chip blocking as long as Multi-PIP is activated, or until the TV is turned off.*
If Cancel is selected, you return to normal TV viewing.
- *Channel Lock:* When Multi-PIP is activated, and a channel or source is locked, this channel or source will not appear.
- *GUIDE Plus+:* When GUIDE Plus+ is active, Multi-PIP is disabled. When Multi-PIP is active, pressing the GUIDE Plus+ button dismisses Multi-PIP and shows the GUIDE Plus+ full screen.

The main screen displays the channel or source tuned before Multi-PIP was activated and the highlight is on the main screen.

The first PIP screen displays the last channel selected. The following PIP screens display the channels or sources selected in the Surf list (from top to bottom) followed by the channels from the channel map from the lowest to the highest numbered.

② Press the cursor left/right, up/down or in case of PIP 12, also cursor diagonal to highlight a PIP screen. When the highlight is on one of the PIP screens, it begins playing video and the other PIPs freeze. The main screen always continues playing audio and video.

Note:

- Multi-PIP is disabled when a picture is being displayed from the AV4 source;
- Pictures from an AV4 source will never be displayed in Multi-PIP;
- Display Format is disabled when Multi-PIP is active.

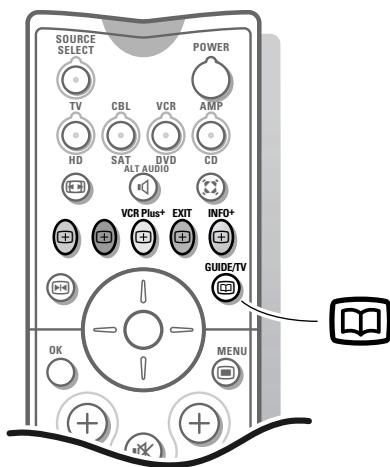
③ Pressing the **CH -/+** or the **PIP** button or the digit buttons changes the channel or source for the currently highlighted screen.

If the currently highlighted screen is tuned to a channel or source already in the surf list, then the next channel or source in the surf list is displayed.

Note: channels cannot be added or deleted from the Surf list when Multi-PIP is activated.

④ Press the **OK** button or the **PIP** button to view the highlighted screen full screen. Multi-PIP is dismissed.

GUIDE Plus+ operation



Once the GUIDE Plus+ system Setup has been completed (See Install menu), and a download of information has been received (usually overnight the first time) you can start operating GUIDE Plus+.

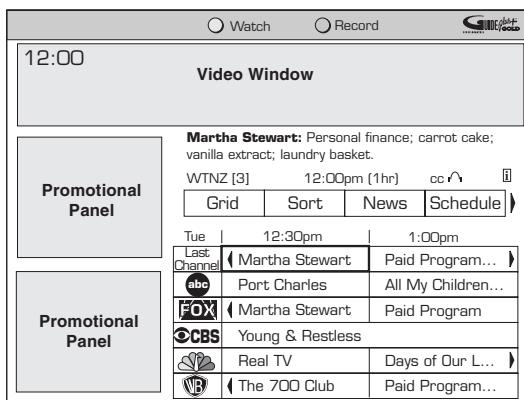
The GUIDE Plus+ system is operated through a menu on-screen display.

The function items match the respective buttons on the remote control.

There are specific remote control buttons that are dedicated to the use of the GUIDE Plus+ system.

The **GUIDE+**, **INFO+**, **VCR+**, **EXIT** and the blue/green buttons are to help you select and use the GUIDE Plus+ menus, make program selections, set VCR recordings, and adjust other system features.

- ① Press the **GUIDE+**  button to display the GUIDE Plus+ informations grid.
- ② Press the cursor up/down, left/right buttons to move through the on-screen menus.
Press the cursor buttons in the direction you want to move within the GUIDE Plus+ menus.
- ③ Press the **OK** button to make selections within the GUIDE Plus+ features.
- ④ Press the blue action button to set the TV to watch certain programs, or to cancel changes within the Channel Editor.
- ⑤ Press the green action button to set the TV to record certain programs, or to turn Channel Editing options On or Off.
- ⑥ Press the **INFO+** button to display detailed description of program content, if available. Use the **CH +/-** button to select a next page, if present.
Press the **MENU**  button to go back to the menu bar with Grid, Sort, etc.
- ⑦ Press the **VCR+** button to set VCR timer recordings. See further.
- ⑧ Press the **EXIT** button to dismiss the GUIDE Plus+ option.



GUIDE Plus+ Grid

- ① Press the **GUIDE+**  button.
The GUIDE Plus+ system information grid appears. Program titles will appear with TV shows when the GUIDE Plus+ information has been received and is operational.
- ② Press the cursor right or left to highlight **Grid**, **Sort**, **News**, **Schedule**, **Message**, **Editor** or **Setup**.
- ③ Press the cursor down to highlight program listings.
- ④ Select the channel logo (with the cursor left) of the highlighted program.
- ⑤ Press the blue action button to lock or unlock the displayed channel in the video window.
When selected **unlocked**, the content of the video window follows the selected program in the grid.
- ⑥ Press the cursor right to highlight the program of the selected channel.
- ⑦ Press the cursor up/down, left/right to scroll through the on-screen grid of program listings.
- ⑧ With a program listing highlighted, press the blue button on the remote to set the TV to watch that specific program at its specific time.
With a program listing highlighted, press the green button on the remote to set the TV to record that specific program at its specific time.

Note: Make sure the IR Blasters have been properly installed and a blank video tape has been placed into the VCR.

Clock
GUIDE Plus+ system provides a clock to assist in programming schedules.

Current Video Window
The current highlighted program is displayed if the channel has been unlocked with the blue button.
If the channel has been locked with the blue button, the current program of that channel will be displayed.
Blocked channels with Channel Lock are not displayed.

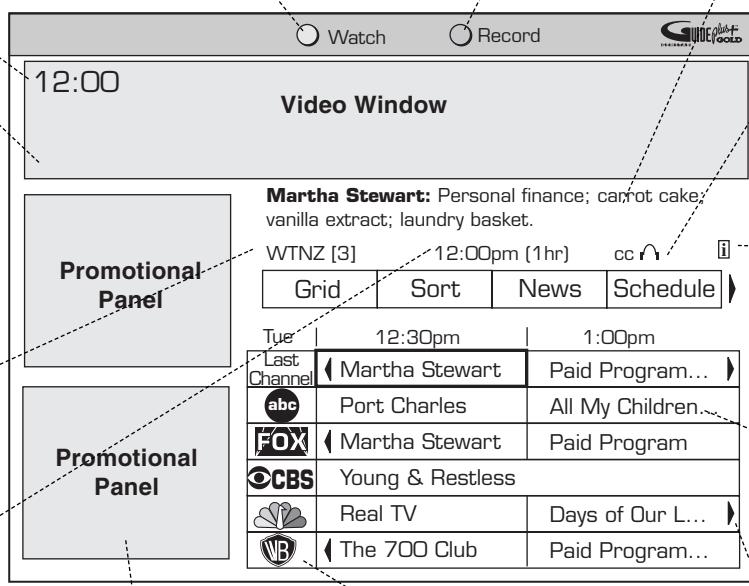
Channel
Channel indication of highlighted program.

Time/Duration
Time the highlighted program is scheduled to appear and the length of the show.

Watch button (button blue)
Program to watch certain shows.

Record button (button green)
Program timer recordings of your favorite shows.

Explanation area
Brief explanation of highlighted program selected within the grid. This area also explains how to move within the grid.



Program Advertisements
Network advertisements for upcoming programming.
Highlighting this area with cursor left and up/down will display more information.

Channel logo

CC **Closed Captioning**
Indicates Closed Caption material has been encoded.

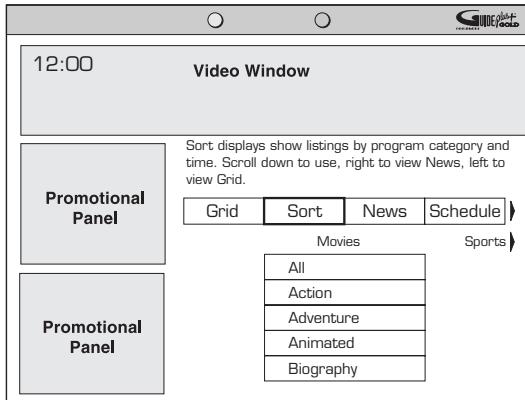
i Info+
Programs that display this icon have more information about the program.
To access it, press the **info+** button on the remote.

Program list
Information about daily programming including program name, date, time, broadcaster, program information.

► Press the cursor right or left to get information about the previous or following program.

GUIDE Plus+ Sort

When the feature **Sort** is selected, the Sort screen is displayed and a sub category of program titles will be shown on the screen.



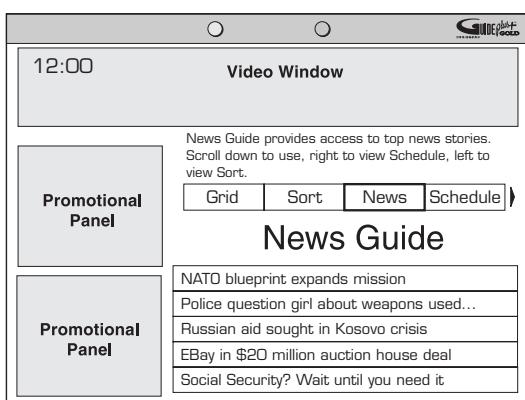
- 1 Press the **GUIDE+**  button on the remote to display the GUIDE Plus+ system information grid.
- 2 Press the cursor right to highlight the word **Sort**.
- 3 Press the cursor down to highlight the desired program title category (Movies, Sports, Children....).
- 4 Press the cursor right to select the desired title category.
- 5 Press the cursor down to highlight one of the sub categories of the title category.
- 6 Press the **OK** button and in a few moments all the programmed shows of the selected sub category of the title category scheduled for your viewing area will be displayed.

Note: If Watch or Record has been selected using the blue or green buttons on the remote, refer to the Schedule section of GUIDE Plus+ system, to view what you've added or if you want to cancel a recording.

GUIDE Plus+ News

GUIDE Plus+ System News offers a special area where the latest top news stories can be read.

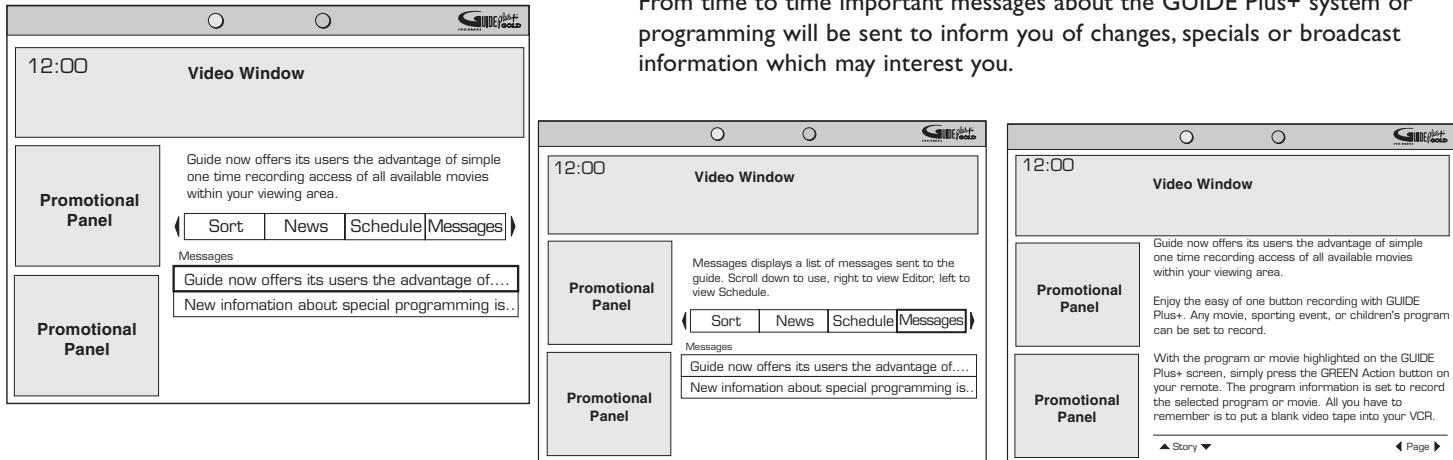
A list of news story topics are displayed and can be brought up on the screen just like an electronic type of newspaper.



- 1 Press the **GUIDE+**  button on the remote to display the GUIDE Plus+ system information grid.
- 2 Press the cursor right to highlight the word **News**.
- 3 Press the cursor down to highlight a News Headline. A brief description of the selected news article will appear at the top of the screen.
- 4 Press the cursor right to view the News page full screen.
- 5 With the cursor left/right scroll through the article, with the cursor up/down bring up the next or the previous story.
- 6 Press the cursor left/right again to return to the list of headline News.

GUIDE Plus+ Messages

From time to time important messages about the GUIDE Plus+ system or programming will be sent to inform you of changes, specials or broadcast information which may interest you.



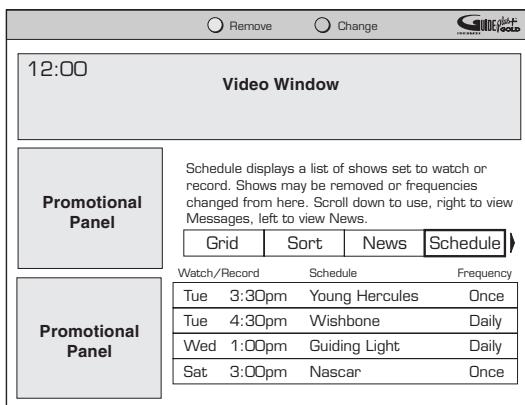
- 1 Press the **GUIDE+**  button on the remote to display the GUIDE Plus+ system program grid.
- 2 Press the cursor right to highlight the word **Messages**. The **Messages** screen appears.
- 3 Press the cursor down to highlight a message line. A brief description will appear at the top of the screen.
- 4 Press the **OK** button to view the message page full screen.
- 5 Press the cursor up/down to scroll through the story, left/right to view the next or the previous message pages.
- 6 Press the **OK** button again to return to the list of messages.

GUIDE Plus+ Record/Watch programs

- 1 Press the **GUIDE+**  button on the remote to display the GUIDE Plus+ system information grid.
- 2 Press the cursor up/down to highlight a program you wish to Record or to Watch.
Note: A timed recording can also be made from any of the Sort screens. This is the easiest way to record Movies, Sporting Events or Children's programming.
- 3 Press the green button on the remote to set a timer recording. Press the blue button on the remote to set the TV to watch the highlighted program at its designated time and channel. Press the green button again and repeatedly to change the record or watch frequency: once, daily or weekly.

Note: Multiple recording or watch reminders can be set unless there is a time conflict. If a conflict should occur, the screen will let you know and ask if you would like to enter the Schedule to remove the previously scheduled show. Press the green button to move to the Schedule screen to review the information stored. Press the blue button to cancel a current program setting. Follow the instructions on screen.

GUIDE Plus+ Schedule

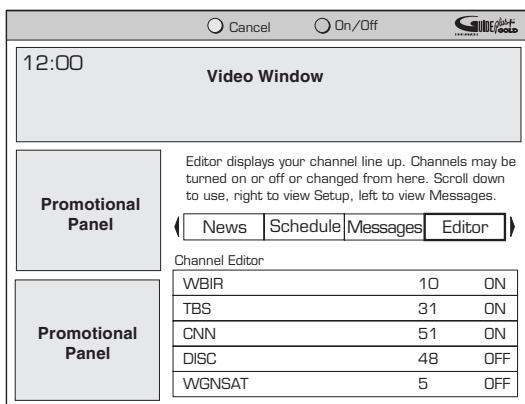


The **Schedule** feature allows you to view a list of programs that have been set to Watch or to Record.

This is also the area to cancel any set of recordings if a scheduling conflict should occur.

- 1 Press the **GUIDE+** button on the remote to display the GUIDE Plus+ system information grid.
- 2 Press the cursor left/right to highlight the word **Schedule**. Schedule displays a list of shows set to watch or to record showing the day, time, program name and frequency.
- 3 Press the cursor up/down to highlight a show set to watch or to record.
- 4 Press the green button on the remote to change the frequency into once, daily or weekly.
Press the blue button to remove a selected program set.
- 5 Press the **OK** button to return to the information grid.

GUIDE Plus+ Editor



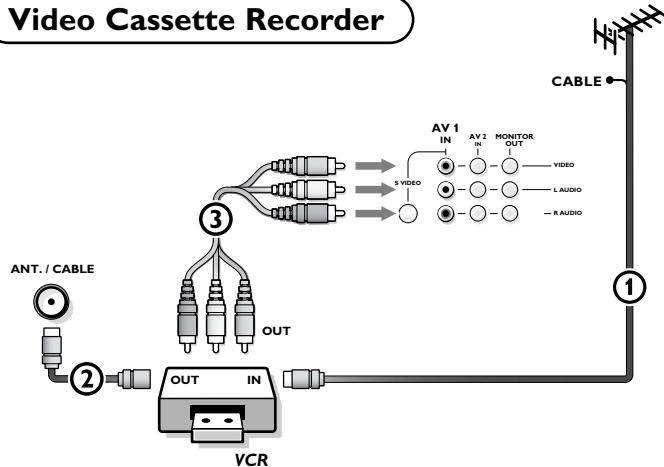
The GUIDE Plus+ Editor feature allows you to drop or delete unwanted channels from the program list; change the title or name for program channels; and select whether channel status information will be displayed.

- 1 Press the **GUIDE+** button on the remote to display the GUIDE Plus+ system program grid.
- 2 Press the cursor right to highlight the word **Editor**. The channel editor screen appears.
- 3 Press the cursor down to highlight the channel to which you wish to make changes.
- 4 Press the digit button(s) on the remote to change the number of a channel.
- 5 Press the green button on the remote to toggle between **On** or **Off** to display the channel reference information.
- 6 Press the blue button on the remote to cancel any changes made to the GUIDE Plus+ Editor.

Connect Accessory Devices

There is a wide range of audio and video devices that can be connected to your TV. The following connection diagrams show you how to connect them.

Video Cassette Recorder



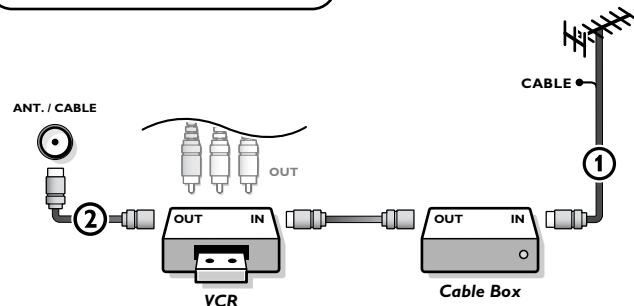
- ① Connect the cable TV cable ① to the **RF IN** socket of your VCR.
- ② Connect another RF cable ② from the output **OUT** of your VCR to the TV's **ANT./CABLE** jack.
- ③ Better playback quality can be obtained if you also connect the Video, Audio Left and Right (only for stereo devices) AV cables ③ to the **VIDEO**, **L** and **R AUDIO** input **AV1 IN** jacks.

The **MONITOR OUT** connectors can be used for daisy chaining or to record programs from your TV. See Record with your VCR, p. 43.

If your VCR has an S-VHS video jack:

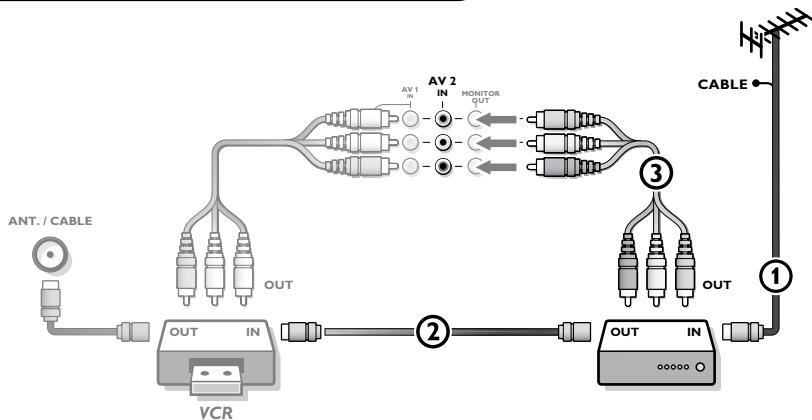
For improved picture quality, connect a S-video cable with the **S-VIDEO** input instead of connecting the VCR to the **VIDEO** jack of **AV1 IN**.
S-Video does not provide audio, so audio cables must still be connected to provide sound.

VCR and Cable Box



- ① Connect the cable TV antenna ① to the cable box's **IN** jack.
- ② Connect the cable box's **OUT** jack to the VCR's **RF IN** socket.
- ③ Proceed with the as above described procedure for Video recorder, starting with step ②.

VCR with other AV peripherals



- ① Interconnect your VCR with an extra RF cable ②.
- ② To obtain better picture quality, also connect the Video, Audio left and Audio right (only for stereo devices) cables ③ to the **VIDEO**, **L** and **R AUDIO** input **AV2 IN** jacks.

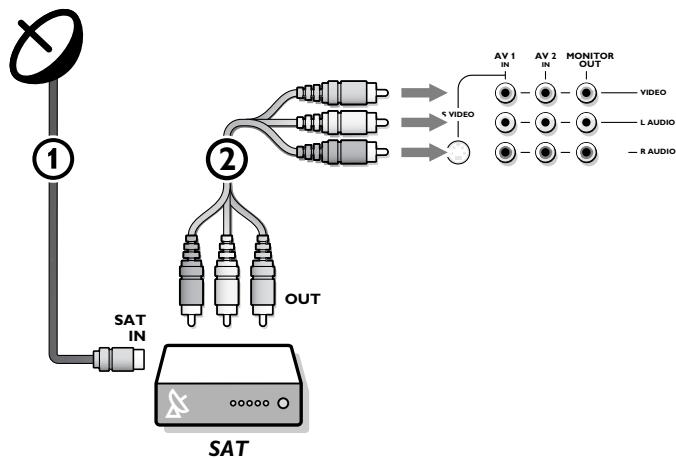
Note: See Connect Video Cassette Recorder on previous page.

When a VCR is not connected to **MONITOR OUT** you can only record a program from the antenna or from the cable system.

Only when a VCR is connected to **MONITOR OUT** it is possible to record a program from other devices connected to the TV. See Record with your VCR, p. 43.

Note: AV1 IN can handle CVBS and Y/C; AV2 IN CVBS; AV3 IN CVBS and Y-Pb-Pr and Y/C; AV4 IN digital signals of a digital HD receiver; SIDE can handle CVBS and Y/C.

Satellite Receiver

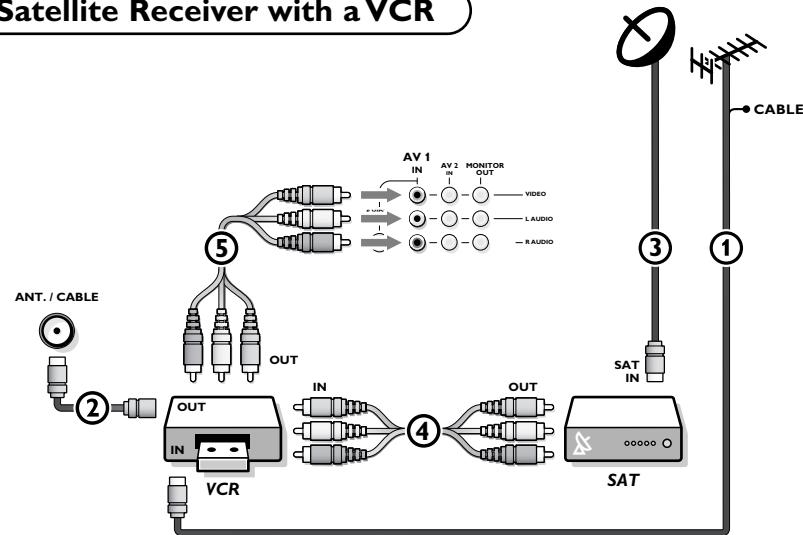


- ① Connect the satellite antenna cable ① to the satellite receiver's **SATELLITE IN** jack.
- ② Connect the Video, Audio left and right (only for stereo devices), AV cables ② to the **VIDEO**, **L** and **R AUDIO** input **AV1 IN** or **AV2 IN** jacks.

If your satellite receiver has an **S-VHS video jack**:

For improved picture quality, connect a S-VHS video cable with the **S-VIDEO** input instead of connecting the satellite receiver to the **VIDEO** jack of **AV1 IN**.

Satellite Receiver with a VCR



- 1 Connect the cable TV cable (1) to the **RF IN** socket of your VCR.
- 2 Connect another RF cable (2) from the output of your VCR to the TV's **ANT./CABLE** jack.
- 3 Connect the satellite antenna cable (3) to the satellite receiver's **SATELLITE IN** jack.
- 4 Connect the AV cables (4) to the satellite receiver's **AV OUT** jacks and to the VCR's **AV IN** jacks.
- 5 Connect the VCR's **AV OUT** jacks (5) to the TV's **AV1** or **AV2 IN** jacks.

When a VCR is not connected to **MONITOR OUT** you can only record a program from the antenna or from the cable system.

Only when a VCR is connected to **MONITOR OUT** it is possible to record a program from other devices connected to the TV. (See Record with your VCR, p. 43.)

DVD Player

DVD player with AV connectors

Connect the AV cables to the DVD player's **AV OUT** jacks and to the TV's **AV2 IN** jacks.

If your DVD player has an **S-VIDEO OUT**(put) jack:

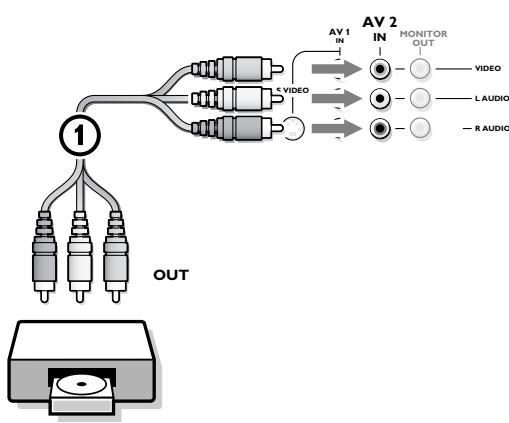
Connect the AV cables to the DVD player's **AV OUT** jacks and to the TV's **AV3 IN** jacks.

Connect an **S-VIDEO** cable with the **S-VIDEO** input instead of connecting the DVD player to the video jack.

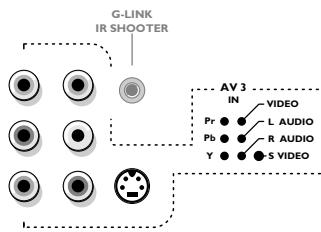
DVD player with Component Video Output Connectors

1 Connect the three separate component video cables to the DVD player's **Y, Pb** and **Pr** jacks and to the **Y, Pb** and **Pr AV3 IN** jacks on the TV.

2 Connect the audio cable to the DVD player's audio **L** and **R** jacks and to the **L** and **R** audio **AV3** jacks on the TV.



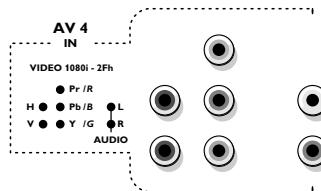
Peripherals connected to AV3



There are three possible ways to connect your Accessory Devices to the **AV3** input.

- 1** • In case of a peripheral with CVBS output, connect the video cable to the video input of the TV.
• In case of a peripheral with S-VHS output, connect the video cable to the **S-VIDEO** input of the TV.
• In case of a peripheral with component video cables, connect them to the **Pb**, **Pr** and **Y** inputs **AND** also connect a video cable to the video input (in order to have correct picture reproduction).
- 2** Always connect the audio cables to the peripheral's **AUDIO L** and **R** jacks and to the **L AUDIO** and **R AUDIO AV3** jacks on the TV.

AV4 Digital High Definition input



When you have a Digital Antenna cable connected to a digital Set top Box, connect the Set top Box to the **AV4 IN VIDEO 2 Fh** input.

Connect a Set top Box with 2 Fh RGB output to the **H**, **V**, **Pr**, **Pb** and **Y** jacks and to the **L** and **R AUDIO** jacks.

Connect a Set top Box with 2Fh Pr, Pb, Y output to the **Pr**, **Pb** and **Y** jacks and to the **L** and **R AUDIO** jacks.

See also the manual of your High Definition Set top Box.

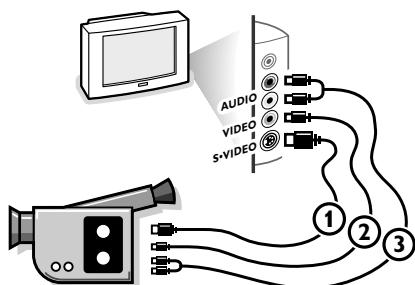
Note: This television is designed to accept high definition signal standards as specified by the Electronic Industries Association standard EIA770.3.

Set-top boxes from different manufacturers have the possibility of differing output standards which may cause difficulties for the television to properly display.

Warning: in case you notice scrolling images, wrong colors or no color, no picture, or even combinations of these on your screen, check if the connections are done in the right way:

- for Y, Pb, Pr 2Fh: check if the cable colors match with the input connector colors
- for RGB 2Fh: check additionally if the H and V cables are connected to the respective H and V input connectors, and if necessary exchange both connections.

Camera and Camcorder



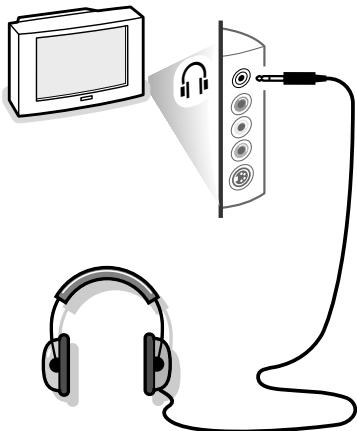
- 1** Connect your camera or camcorder to the AV inputs at the right side of your TV.

- 2** Connect the device to **VIDEO** **(2)** and **AUDIO L** **(3)** for mono devices.

- 3** For stereo devices also connect **AUDIO R** **(3)**.

S-Video quality with an S-VHS, Hi-8 or Digital camcorder is obtained by connecting the S-Video cables with the **S-VIDEO** input **(1)** (instead of **VIDEO** **(2)**) and **AUDIO** inputs **(3)**.

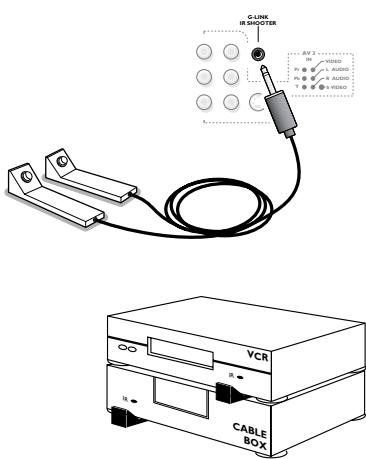
Note: If you prefer, you can also connect the camcorder to one of the TV's rear AV IN jacks.



Headphones

- 1 Insert the plug into the headphone socket  at the right side of the TV.
- 2 Press  on the remote control to switch off the internal speakers of the TV. The headphone impedance must be between 8 and 4000 Ohms. The headphone socket has a 3.5 mm mini stereo jack.

In the **SOUND** menu select **Headphone volume** to adjust the headphone volume.



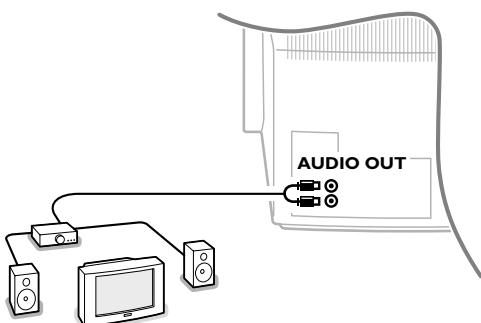
VCR/Cable Converter Box

The Infrared - IR Blaster cables supplied enable you to make timed program recordings between the GUIDE Plus+ system and accessory VCRs/Cable Converter boxes.

The IR Blasters work as small sized remote transmitters to turn on and select channels on the VCR and Cable convertor box in order to accomplish a timed VCR Plus+ recording. See GUIDE Plus+, p. 43.

- 1 Insert the connector end of the supplied Y-shape IR Shooter cable into the GUIDE Plus+ **G-LINK IR SHOOTER** output jack on the rear of the TV (where you removed the Demo Pin).
- 2 Position the control (transmitter) ends of the IR blaster under the front edge of the accessory VCR or Cable Converter. Two transmitting blasters are provided for those who have both a VCR and an accessory Cable Converter box. Be sure that the transmitting end of the IR blaster is facing up, ready to transmit into the front of the remote sensor window on the VCR or Cable Converter box. The IR Blaster should be positioned out as far from the front of the VCR or Cable Box as possible.

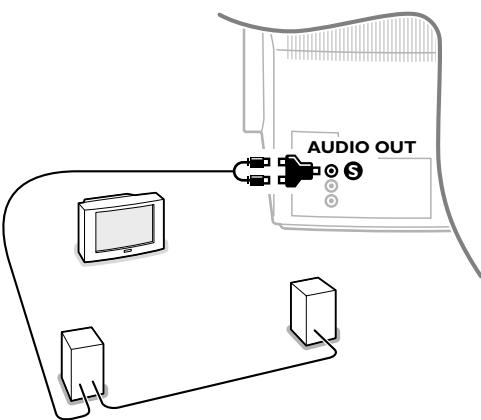
Connect External Speakers / Amplifier



Stereo amplifier and two extra FRONT speakers

To enhance the sound reproduction of your TV you can connect two extra speakers via an external amplifier.

- ① Connect the audio cables to the audio input of your amplifier and to the **VARIABLE LINE AUDIO OUT L** and **R** jacks at the back of your TV.
The output level is controlled by the volume control of your TV.
Note: Turn off the TV and your audio amplifier before connecting them. Set the audio amplifier's volume to minimum.
- ② Select **Center Mode Yes** in the Settings menu, Speakers, see p. 21. See Sound menu, Sound Mode, p. 15 for the available Sound modes.
- ③ Adjust the volume of the audio amplifier.
You may make use of the Test Tone function in the Settings menu, see p. 22, to have a reference of the loudness of the separate speakers.
Note: Once you have adjusted the volume of the amplifier, do not change it while watching TV as the whole configuration operates with the volume adjustment of your TV.



Surround speakers

To enjoy Dolby Pro Logic Surround sound, you can connect two rear speakers (16 Ohm only!) with built in amplifiers (or an audio amplifier with rear speakers).

- ① Connect the audio cables to the rear speakers and to the Dolby surround output **S** in the **VARIABLE LINE OUT** grouping at the rear of your TV as shown opposite.
There is only one cinch output for both speakers. Use a mono to stereo adaptor to connect two surround speakers.
Note: Turn off the TV and the rear speakers before connecting them.
- ② Adjust the volume of the rear speakers.
You can use the Test Tone function in the Settings menu, Speakers, see p. 22, to have a reference of the loudness of the surround speakers in relation to the other speakers.
Note: Once you have adjusted the volume of the rear speakers, do not change it while watching TV, as the whole configuration operates with the volume adjustment of your TV.

Dolby Pro Logic Surround amplifier

- ① Connect the Dolby Pro Logic Surround amplifier to the **MONITOR OUT L** and **R** at the back of your TV.
- ② Select **Center Mode No** in the Settings menu, Speakers, see p. 21. The audio output is now independent of volume, bass, treble and Sound Mode settings.
- ③ Turn off the volume of the TV with the mute button . All volume settings, tone control and speaker connections have to be done via the external Dolby Pro Logic amplifier.

If you want to connect more devices to your TV, consult your retailer.

Setting the remote control to work accessory devices

Your remote control is set to work your TV and many infrared remote (IR) control VCRs, Cable TV Converter Boxes, DVD players, Satellite Receivers, etc.

Press the **VCR, DVD, SAT, HD, CD, CBL** or **AMP** button according to the accessory device you want to operate with this remote control.

Toggle if needed by pressing more than one second until the correct colored LED lights up. See Use of the Remote control, p. 11.

If the function buttons on the remote control also work the selected accessory device, then the remote is ready and no further steps are needed.

If the functions buttons do not work the selected accessory device

According to the device(s) you own, you may make your remote control ready for them by a direct entry code. Proceed as following.

Code Setup

1 Press the according mode button (toggle if needed by pressing more than one second) to select the device, which you need to setup.

2 Press the **digit buttons 1 and 3 at the same time**, for about 5 seconds, and until the backlighting buttons and the selected mode button light up.

3 Enter with the digit buttons and within 30 seconds, the 4 digit remote code no. for your brand of accessory device. See pages 44 and 45.

Note: If no code or an incomplete code is entered within 30 seconds, the backlight and selected mode button will turn off and give a long blink before returning to the previous programmed code.

If a valid 4 digit code is entered the backlight and the selected mode button, will turn off and then blink twice. The remote control will assign that code no. to the mode selected.

Remark: If more than one number is listed for your device, you may have to try the other codes until your device operates with the remote.

If after repeated attempts the code number method does not work for your accessory device, try the Auto Search method following.

Auto Search method

1 Turn on the desired device (VCR, Cable box, etc.).

2 Press the according mode button to select the device which you need to search.

Point the remote control toward the accessory device. Stand at least six feet away from the front of the device. Make sure you are in the line of sight of the IR receiving eye of your device.

3 Press the **digit buttons 1 and 3 at the same time**, for about 5 seconds, and until the backlighting buttons and the selected mode button light up.

4 Press and release the red **POWER** button.

The backlighting button and the selected mode button will turn off.

The remote control will automatically start stepping to the next code in the library simultaneously sending the code for channel up for that particular ID. The backlighting buttons and the selected mode buttons will give a short blink after each search. Watch the channel number indicator on your device.

Channel numbers will scan up when the unit has been identified. This may take some minutes.

Note: For devices DVD and CD, insert a disc and press PLAY on the device. The remote control will send the command next track. Switch AV receivers to TUNER function.

5 Press and release the red **POWER** button as soon as the channel numbers start to scan up.

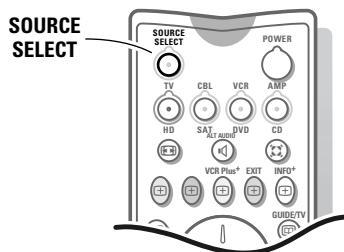
The remote control will assign that code no. to the mode selected.

The backlight and the selected mode button will blink twice to indicate the code setup has been completed.

The remote control is ready to operate with the accessory device.

Note: If any other key is pressed, or no key is pressed during Auto Search, the Search will be ended. The backlighting and selected mode button will give a long blink. The remote keeps its previous code.

To select connected devices



Devices connected to the rear or on the right side of the TV

Press the **SOURCE SELECT** button repeatedly to select **AV1, AV2, AV3, AV4** or **SIDE**, according to where you connected your devices at the rear or on the right side of your TV.

If you want to change to TV channels?

Enter the channel number of the TV channel which you want to watch with the digit buttons.

VCR Control buttons



Most of the audio and video devices from our range of products can be operated with the remote control of your TV.

Press the **VCR, DVD, SAT, HD, CD, CBL** or **AMP** button according to the devices you want to operate with this remote control. See Use of the remote control, p. 11.

VCR buttons

After you pressed the **VCR** button, press one of the VCR buttons under the door of the remote control:

- for record,
- ⌚ VCR timer,
- ⏸ for pause,
- ◀ for rewind,
- ⏹ for stop,
- ▶ for play,
- ▶▶ for fast forward,
- CH + for sequential channel selection from the video recorder tuner,
- 0 to 9 to select a channel number from your video recorder tuner,

These buttons function with devices that uses the RC5 signalling standard.

Record with your VCR

To record S-VHS quality, connect an S-VHS peripheral directly to the VCR.

Record a TV program

You can record a TV program using your VCR's tuner without affecting your TV.

- ① Select the channel number on your VCR.
- ② Set your VCR to record.
See the handbook for your VCR.

Switching channel numbers on your TV does not disturb recording !

Record to VCR from MONITOR OUT

You can record a program on your VCR connected to **MONITOR OUT** from Audio/Video devices connected to **AV1, AV2, AV3** or to sockets on the right side of the TV.

- ① Switch on the device.
- ② Select the right external on your TV and on your VCR.
- ③ Set your VCR to record.
You record what you are watching on the screen.

*Do not switch channels or switch off your TV when you are recording through **MONITOR OUT**.*

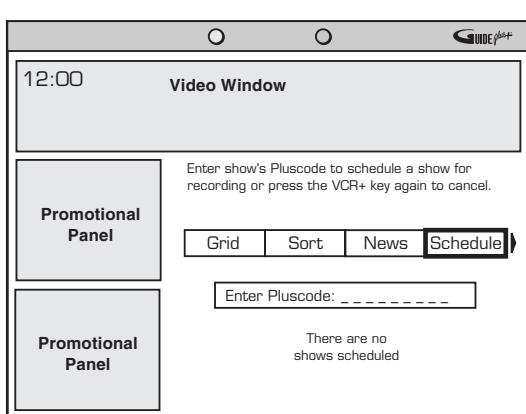
VCR Plus+ ® system



The VCR Plus+ ® system works with the GUIDE Plus+ system schedule information to set VCR recordings.

This system relies on code numbers listed in your local TV Guide, or programming information printed in your local newspaper.

Programs are given PlusCode programming numbers and are printed next to the program listings. The PlusCode programming number is required to properly setup your VCR for a VCR Plus+ system recording.



- ① Press the **VCR+** button on the remote control.
The GUIDE Plus+ Schedule display panel appears.
- ② Enter the PlusCode programming number for the show you wish to record or press the **VCR+** button again to cancel.
Use the digit buttons on the remote to enter the PlusCode.
- ③ Press the **OK** button to set the VCR Plus+ system timer recording.
- ④ Press the green button on the remote to change the record frequency: once, daily or weekly.
Press the blue button on the remote to remove the VCR Plus+ system timer recording from the Schedule.

Remote Control Direct Entry Codes for Accessory Devices

Amplifiers	Remote Code No.		Receivers	Remote Code No.	
Aiwa	.0433	Radio Shack	.0042, 0342, 0910, 0824	Sanyo	.0206
Carver	.0296	Recoton	.0427	Scott	.0332
Curtis Mathes	.0327	Regal	.0047, 0286	Sears	.0332
Denon	.0187	Regency	.0029	Sharp	.0064, 0207, 0888
GE	.0105	Rembrandt	.0038	Sherwood	.0207
Harman/Kardon	.0919	Runco	.0027	Sony	.0027, 0212, 0517
JVC	.0358	SL Marx	.0067	Soundesign	.0172
Linn	.0296	Samsung	.0067, 0171	Tascam	.0447
Magnavox	.0296	Scientific Atlanta	.0035, 0044, 0504, 0904	Teac	.0420, 0447, 0201, 0207
Marantz	.0296, 0348	Signal	.0042, 0067	Technics	.0330, 0056
Nakamichi	.0348	Signature	.0038	Victor	.0099
Optimus	.0422	Sprucer	.0048	Wards	.0080, 0184
Panasonic	.0335	Starcom	.0030, 0042	Yamaha	.0214, 0063
Philips	.0296, 0919	Stargate	.0067, 0042, 0824	Yorx	.0488
Pioneer	.0040, 0327	Starquest	.0042		
Realistic	.0422	Sylvania	.0028		
Sansui	.0348	TV86	.0090		
Sony	.0716, 0247	Tandy	.0285		
Soundesign	.0105	Teleview	.0067		
Technics	.0335	Texscan	.0028		
Victor	.0358	Tocom	.0039, 0040		
Wards	.0040, 0105	Toshiba	.0027		
Yamaha	.0381	Tusa	.0042		
Cable	Remote Code No.				
ABC	.0030, 0028, 0034, 0035, 0038, .0040, 0041, 0044	Unika	.0180, 0049		
Allegro	.0180, 0342	United Artists	.0034		
Americast	.0926	Universal	.0049, 0083, 0180, 0218		
Antronix	.0049	Viewstar	.0285, 0090		
Archer	.0049, 0180, 0824	Zenith	.0027, 0552, 0926		
Belcor	.0083	Zentek	.0427		
Bell & Howell	.0041				
Cable Star	.0083				
Cabletenna	.0049				
Cableview	.0049				
Century	.0180				
Citizen	.0180, 0342				
Colour Voice	.0052				
Comtronics	.0067				
Contec	.0046				
Eastern	.0029				
Emerson	.0824				
Everquest	.0042, 0067				
Focus	.0427				
GC Electronics	.0083				
Garrard	.0180				
Gemini	.0042				
General Instrument	.0303, 0503, 0038, 0837				
GoldStar	.0067, 0171				
Goodmind	.0824				
Hamlin	.0047, 0036, 0286, 0061				
Hitachi	.0038				
Hytex	.0034				
Jasco	.0042, 0180, 0342				
Jerrold	.0030, 0039, 0303, 0041, 0038, 0503, .0042, 0837				
Memorex	.0027				
Movie Time	.0090				
NSC	.0090				
Oak	.0046, 0034				
Optimus	.0048				
Panasonic	.0048, 0134, 0027				
Paragon	.0027				
Philips	.0052, 0180				
Pioneer	.0171, 0560, 0904				
Popular Mechanics	.0427				
Pulsar	.0027				
Quasar	.0027				
RCA	.0048				
CD Players	Remote Code No.				
Aiwa	.0184				
Burmester	.0447				
California Audio Labs	.0056				
Carver	.0184, 0206, 0464				
DKK	.0027				
Denon	.0030, 0900				
Emerson	.0332				
Fisher	.0201, 0206				
Garrard	.0420, 0447				
Genexxa	.0059, 0332				
Harman/Kardon	.0200, 0184				
Hitachi	.0059				
JVC	.0099				
Kenwood	.0055, 0217, 0853, 0064, .0653, 0708				
Krell	.0184				
LXI	.0332				
Linn	.0184				
MCS	.0056				
MTC	.0447				
Magnavox	.0184, 0332				
Marantz	.0184, 0056, 0207				
Mission	.0184				
NSM	.0184				
Nikko	.0201				
Onkyo	.0128, 0895				
Optimus	.0447, 0059, 0206, 0495, .0464, 0332, 0027, 0064, 0172				
Panasonic	.0056, 0330				
Parasound	.0447				
Philips	.0184, 0653				
Pioneer	.0059, 0495, 0271, 0332				
Proton	.0184				
QED	.0184				
Quasar	.0056				
RCA	.0080, 0332, 0206, 0791				
Realistic	.0206, 0207, 0447				
Rotel	.0184, 0447				
SAE	.0184				
Sansui	.0184, 0332				

Remote Control Direct Entry Codes for Accessory Devices

Satellite	Remote Code No.	
AlphaStar	.0799	Daewoo .0305, 0588, 0047, 0072
Amplica	.0099	Daytron .0047
Amway	.0102	Denon .0069
Astro Industries	.0122	Dynatech .0027
BSR	.0122	Electrohome .0064
Capetronic	.0122	Electrophonic .0064
Channel Master	.0045, 0239	Emerex .0059
Chaparral	.0080, 0236, 0243	Emerson .0211, 0029, 0236, 0305, 0148, 0235, 0506, 0588, 0088, 0239, 0027, 0064, 0070
Curtis Mathes	.0088, 0099	Fisher .0074, 0131, 0081
DX Antenna	.0068	Fuji .0060, 0062
Drake	.0091, 0272, 0045, 0176	Funai .0027
Echostar	.0307, 0802, 0175, 0186, 0296	GE .0062, 0087, 0075, 0229, 0267
Expressvu	.0802	Garrard .0027
General Instrument	.0388, 0896, 0654	Go Video .0459, 0553
HTS	.0802	GoldStar .0064, 0065
Hitachi	.0846	Gradiente .0035, 0027
Homecable	.0265	HI-Q .0074
Hughes Network Systems	.0776	Harley Davidson .0027
Hytek	.0122	Harman/Kardon .0065, 0108
IQ	.0237	Harwood .0099
IQ Prism	.0237	Headquarter .0073
JVC	.0802	Hitachi .0069, 0132, 0027, 0068
Janeil	.0179	Hughes Network Systems .0069
Jerrold	.0388, 0654	JVC .0094, 0035, 0068
Legend	.0296	Jensen .0068
Macom	.0088, 0045	KEC .0064, 0305
Magnavox	.0749, 0751	KLH .0099
Memorex	.0296, 0751	Kenwood .0068, 0094, 0065
Next Level	.0896	Kodak .0062, 0064
Panasonic	.0179, 0728	LXI .0064
Philips	.0227, 0749, 0751	Lloyd's .0027, 0235
Pico	.0102	Logik .0099
Primestar	.0654, 0388	MEI .0062
RCA	.0593, 0170, 0882	MGA .0070, 0088, 0267
Radio Shack	.0896	MGN Technology .0267
Ramsey	.0102	MTC .0027, 0267
Realistic	.0079	Magnasonic .0305
STS	.0237, 0068	Magnavox .0062, 0108, 0027, 0066, 0176
Sony	.0666	Magnin .0267
Star Choice	.0896	Marantz .0108, 0062
Star Trak	.0207	Marta .0064
Toshiba	.0109, 0817, 0088	Matsushita .0062, 0189, 0481
Uniden	.0265, 0079, 0101, 0397, 0751, .0103, 0749	Memorex .0131, 0074, 0027, 0064, 0075, .0062, 0073, 0267, 1064, 0334, .0066, 0236, 1189, 1289
Zenith	.0091, 0883, 0088	Minolta .0132, 0069
VCR	Remote Code No.	
Admiral	.0075, 0236	Mitsubishi .0070, 0088, 0075, 0094
Adventura	.0027	Motorola .0062, 0075
Aiko	.0305	Multitech .0027, 0099
AIWA	.0334, 0027, 0064	NEC .0065, 0068, 0094, 0131
Akai	.0133, 0068, 0088	Nikko .0064
America Action	.0305	Nikon .0061
American High	.0062	Noblex .0267
Asha	.0267	Olympus .0062
Audiovox	.0064	Optimus .1089, 1189, 0075, 1289, 0064, .1075, 0131, 0189, 0459, 0481
Beaumark	.0267	Optonica .0089
Bell & Howell	.0131	Orion .0506, 0029, 0211, 0236
Brocksonic	.0236	Panasonic .0062, 1189, 0189, 0252, .0481, 0643
Broksonic	.0148, 0211, 0029, 0236, 0506	Penney .0062, 0267, 0064, 0069, 0065, 0081
CCE	.0099, 0305	Pentax .0069, 0132
Calix	.0064	Philco .0062, 0236, 0506
Canon	.0062	Philips .0108, 0062, 0089, 0645, 1108, 1208
Capehart	.0047	Pilot .0064
Carver	.0108	Pioneer .0094
Cineral	.0305	Portland .0047
Citizen	.0305, 0064	Profitronic .0267
Colt	.0099	Proscan .0087, 0229
Craig	.0064, 0099, 0074, 0267, 0298	Protec .0099
Curtis Mathes	.0062, 0068, 0087, 0189	Pulsar .0066
Cybernex	.0267	Quarter .0073
Quartz		.0073
Quasar		.0062, 0189, 0481, 1189
RCA		.0087, 0176, 0229, 0069, 0132, .0062, 0075, 0133, 0267
Radio Shack		.0027, 1064
Radix		.0064
Randex		.0064
Realistic		.0027, 0131, 0074, 0075, 0064, .0062, 0089, 0073
ReplayTV		.0641, 0643
Ricoh		.0061
Runco		.0066
STS		.0069
Samsung		.0072, 0267
Sanky		.0066, 0075
Sansui		.0068, 0506, 0027, 0094, 0236, 0298
Sanyo		.0074, 0073, 0131, 0267
Scott		.0211, 0148, 0070, 0072, 0239
Sears		.0081, 0132, 0064, 0069, 0027, 0062, .0073, 0074, 0131
Semp		.0072
Sharp		.0075, 0089
Shintom		.0099
Shogun		.0267
Singer		.0099
Sony		.0060, 0061, 0059, 0027, 0062
Sylvania		.0062, 0108, 0027, 0070
Symphonic		.0027
TMK		.0235, 0267
Tatung		.0068
Teac		.0027, 0068
Technics		.0062, 0189
Teknika		.0027, 0062, 0064
Thomas		.0027
Tivo		.0645
Toshiba		.0072, 0239, 0070
Totevision		.0064, 0267
Unitedech		.0267
Vector		.0072
Vector Research		.0065
Video Concepts		.0072, 0088
Videosonic		.0267
Wards		.0062, 0087, 0089, 0027, 0074, 0239, .0267, 0069, 0075, 0099, 0108, 0176
White Westinghouse		.0305, 0236
XR-1000		.0099, 0027, 0062
Yamaha		.0065
Zenith		.0066, 0027, 0060, 0061, 0236, 0506

Digital Video Disc Remote Code No.

Harman/Kardon	.0609
JVC	.0650, 0585
Kenwood	.0561
Magnavox	.0530
Mitsubishi	.0548
Onkyo	.0654, 0530
Panasonic	.0517, 0659
Philips	.0530, 0566
Pioneer	.0598, 0552, 0659
Proscan	.0549
RCA	.0549
Samsung	.0600
Sharp	.0657
Sony	.0560
Technics	.0517
Theta Digital	.0598
Toshiba	.0530
Yamaha	.0517, 0572
Zenith	.0618, 0530

Before Calling Service

Please make these simple checks before calling service. These tips may save you time and money since charges for television installation and adjustments of customer controls are not covered under your warranty.

Symptoms	Items to Check and Actions to follow
“Ghost” or double images	<ul style="list-style-type: none"> This may be caused by obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.
No power	<ul style="list-style-type: none"> Check that the television's AC power cord is plugged into the mains socket. Unplug the television, wait for 60 seconds. Then re-insert plug into the mains socket and turn on the television again.
No picture	<ul style="list-style-type: none"> Check antenna connections at the rear of the television to see if it is properly connected to the television input terminal. Is it properly secured to the appropriate antenna plug on the TV? Possible broadcast station trouble. Try another channel. Adjust the contrast and brightness settings. Try another auto picture setting. Check the Closed Captions control. Some TEXT modes could block the screen.
Good picture but no sound	<ul style="list-style-type: none"> Increase the VOLUME. Check that the television is not muted, press the  button on the remote control. When no signal is detected, the television automatically switches off the sound. This is proper operation and does not indicate a malfunction. Check the transmission system's sound settings of this set. Check if your speaker configuration corresponds with the selections made in the Speakers Setting, p. 21. No sound from the rear speakers or the center speakers? Select an appropriate Sound mode, according to the broadcasted sound signal or adjust the volume (see Sound Modes, p. 15)
Good sound but poor color or no picture	<ul style="list-style-type: none"> Adjust the contrast and brightness setting. Try another auto picture setting. Check the transmission system's color settings of this set.
Poor picture	<ul style="list-style-type: none"> Sometimes, poor picture quality occurs when having activated an S-VHS camera or camcorder connected to the right side of your TV and another peripheral is connected to AV1 or AV2 at the same time. In this case, switch off one of the other peripherals.
Snowish picture and noise	<ul style="list-style-type: none"> Check the antenna connection.
Horizontal dotted line	<ul style="list-style-type: none"> This may be caused by electrical interference (e.g. hairdryer, nearby neon lights, etc.) Turn off the device.
One white line across the screen	<ul style="list-style-type: none"> Turn off the television immediately and consult a qualified service personnel.
Television not responding to remote control	<ul style="list-style-type: none"> Check whether the batteries are working. Replace if necessary. Clean the remote control sensor lens on the television. Operating range between television and the remote control should not be more than 240". You can still use the M button and the -/+ buttons at the top of your TV. Press the TV button to be sure your remote control is in the TV mode.
GUIDE Plus+	<ul style="list-style-type: none"> No information: - maybe your antenna or cable signal is too weak <ul style="list-style-type: none"> - did you enter your correct local ZIP code number (for owners in the USA) or POSTAL CODE (for Canadian owners) - try another download of program information during the night. No updating of information: you have to keep the mains plug inserted.

If your problem is not solved

Turn your TV off and then on again once.

Never attempt to repair a defective TV yourself.

Check with your dealer or call a TV technician.

Telephone number Philips Customer Care Centre

800-531-0039

Tips

Care of the screen

Clean the TV with a slightly damp soft cloth. Do not use abrasive solvent as it can damage the TV screen.

End of life directives

We are paying a lot of attention to using environmentally-friendly production methods. Your new TV contains materials which can be recycled and reused. At the end of its life specialized companies can dismantle the discarded TV to concentrate the reusable materials and to minimize the amount of materials that must be disposed. Please ensure that you dispose of your old TV according to local regulations.

How to dispose of batteries?

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

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Regulatory Notices - Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and the receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio or television technician for help.

Modifications -

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Philips Consumer Electronics may void the user's authority to operate the equipment.

Cables -

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Canadian notice -

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien -

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Glossary

Active Control

A set of automatic picture improvement algorithms applied to the video image.

Aspect Ratio

The proportions of a rectangular display screen. NTSC television has a 4:3 ratio; HDTV is 16:9.

Audio/Video Inputs

Located on the rear of the TV these connectors (RCA phono type plug) are used for the input of audio and video signals. Designed for use with VCRs (or other accessories) in order to receive higher picture resolution and offer sound connection options.

Auto Picture and Sound Controls

Buttons on the remote control to select predefined picture and sound settings.

Coaxial Cable

A single solid antenna wire normally matched with a metal plug (F-type) end connector that screws (or pushes) directly onto a 75 Ohm input found on the Television or VCR.

CVBS

Stands for Composite Video Blanking Sync. At this level, the color, luminance and synchronization information are combined in one signal. The audio signal is transferred separately.

Display

An on screen message or graphics that help the user operate and adjust TV feature controls. See On Screen Displays (OSD).

IR shooter

A device that allows the TV to send IR signals to another device. In the case of this TV, the Gemstar module uses the IR Blaster to send VCR+ signals to a VCR, to record shows selected for recording in GUIDE Plus+.

LED

Light Emitting Diode or indicator.

Menu

An on-screen listing of feature controls shown on the TV screen that are made available for user adjustments.

MPAA

Motion Picture Association of America

Multichannel Television sound (MTS)

The broadcast standard that allows for stereo sound to be transmitted with the TV picture.

Natural Motion

Philips Technology that makes movement on television less jerky and appear more natural.

NTSC (analog video signals)

National Television Standards Committee format devised for TV broadcasting signals in the 1940s (525 lines: 30 Hz.)

On Screen Displays (OSD)

Refers to the wording or messages generated by the TV to help the user with specific feature controls (color adjustment, programming, etc.)

Picture Freeze

TV mode which allows you to "freeze" a certain image in order to study a specific detail at ease, e.g. to make notes of certain program information like phone numbers.

Programming

The procedure of adding or deleting channel numbers into the TV's memory circuits. In this way the TV 'remembers' only the locally available or desired channel numbers and skips over any unwanted channel numbers.

RF

Radio Frequency or modulated signal design used as the carrier for television

broadcasts.

Second Audio Program (SAP)

Another or additional audio channel provided for in the Multichannel Television Sound (MTS) broadcast standard. A monaural soundtrack included within the recorded or video signal (usually containing a second language translation for the displayed programming).

Sleep Timer

Function with which you can set a time period after which the TV should switch itself to standby.

Subwoofer

A speaker designed for audio playback of only the lowest-frequency notes (under 100 Hz).

Surround Pro Logic

Literally wraps you in 4-channel sound. It brings your favorite movies to life with all the realism and impact of cinema sound as though you are part of the action.

S-Video Input

Allows direct connection of high-resolution video sources, such as a Super VHS videocassette recorder, Laser Disc player, etc. Provides improved picture resolution, sharpness, and clarity.

Tint

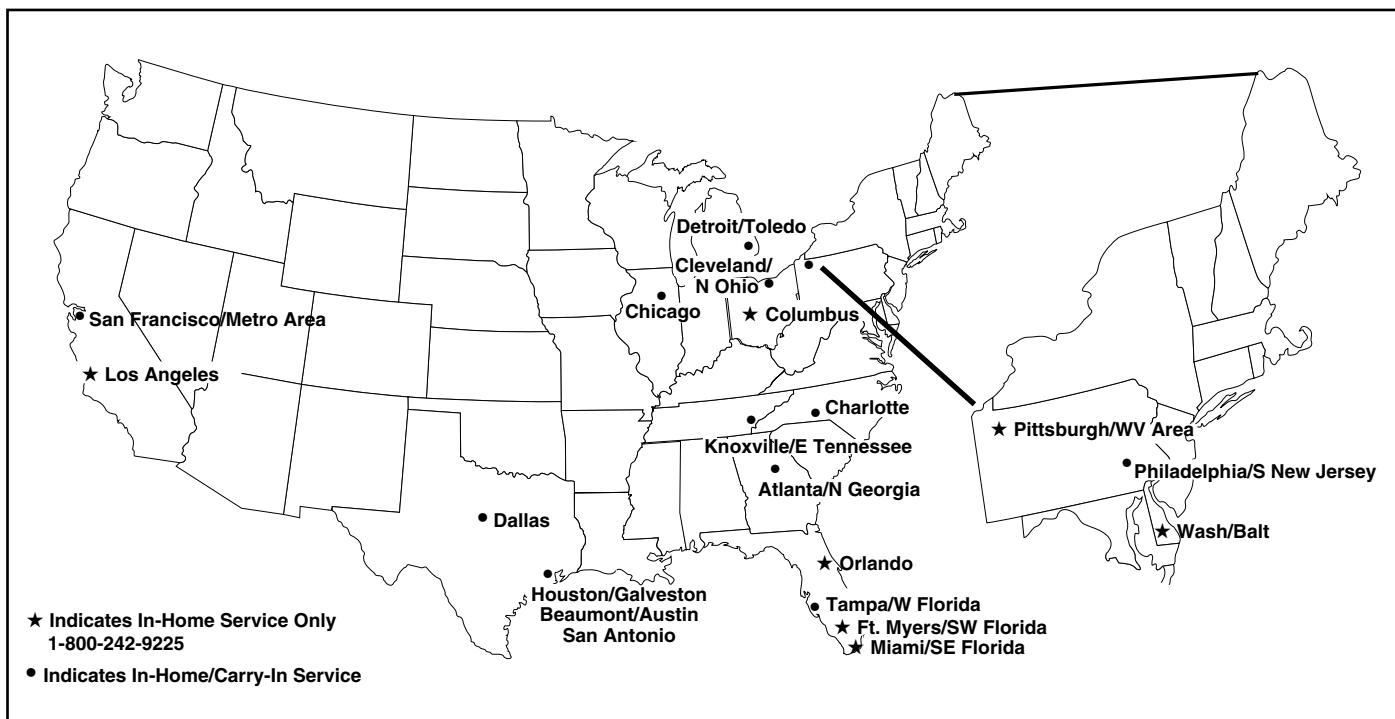
TV-function to modify the general color balance between cool and warm and to adjust it according to your personal preference.

Variable Audio Output

An adjustable audio output which allows for volume variations at the source.

Philips Consumer Electronics Company

Factory Service Center Locations



Note: If you reside in one of our Philips Factory Service Branch areas (see directory on back), you can contact the nearest Service Branch to obtain efficient and expedient repair for your product. If your product is In-Warranty, you should have proof-of-purchase to ensure No Charge Service. For Out-of-Warranty service, call the location nearest you.

Nota: Si vous résidez dans une des régions desservies par une succursale de service après vente du fabricant Philips (voir liste ci-dessous), vous pourrez contacter la branche de service après vente la plus près de chez vous pour obtenir un service après vente rapide et efficace. Si le produit est sous garantie, il suffira de présenter une preuve d'achat pour bénéficier d'un service sans frais. Pour les produits non couverts par la garantie, contactez le centre le plus près de chez vous.

Nota: Si Ud. reside en una de nuestras zonas para sucursales Philips de servicio al de fábrica (ver directorio más abajo), Ud. puede comunicarse con la sucursal de servicio más cercana para obtener una reparación oportuna y eficaz de su producto. Si su producto está todavía bajo garantía, Ud. debe presentar comprobante de compra para no ocasionar ningunos cargos por servicio. Para servicio después del vencimiento de la garantía, llame al lugar más cercano de los abajo indicados.

In Canada

How you can obtain efficient and expedient carry-in, mail-in, or in-home service for your product
 Please contact Philips at 1-800-661-6162 (French speaking)
 1-800-363-7278 (English speaking)

Au Canada

Comment obtenir le service après-vente pour les produits apportés ou envoyés par la poste à notre centre de service ou le service à domicile
 Veuillez contacter philips à: 1-800-661-6162 (Francophone)
 1-800-363-7278

En el Canadá

Cómo recibir servicio eficiente para su producto, en persona, por correo o a domicilio
 Favor de comunicarse con Philips al: 1-800-661-6162 (francófono)
 1-800-363-7278 (anglófono)

Quality service is as close as your telephone! Simply look over the list below for the number of a Factory Service Center near you. Your product will receive efficient and expedient carry-in, mail-in, or in-home service, and you will receive peace of mind, knowing your product is being given the expert attention of Philips' Factory Service. And, if the phone number listed for your area is long distance, call **1-800-242-9225** for Factory Service.

Comment obtenir notre service après vente rapide et efficace soit par courrier, à domicile, ou en se présentant à un centre de service Philips. Plus de 600 centers de réception de produits à Réparer à travers le pays: contacter le centre de service aux consommateurs le plus proche pour savoir l'emplacement de ces dépôts dans un rayon de 50 à 75 miles (80 km à 120 km) du centre de service local.

Cómo obtener un servicio oportunoy eficiente por correo, en casa o en persona para su producto a través de un centro Philips de servicio. Mas de 600 sitios por todo el país para la recepción de productos necesitados de reparaciones: comunicarse con el centro de servicio de fabrica mas cercano para estos lugares dentro de un radio de 80 a 120 km (50 a 75 millas) del centro de servicio local.

GEORGIA

Philips Factory Service of Georgia
200 N. Cobb Pkwy., Suite 120
Marietta, GA 30062
(770) 795-0085

FLORIDA

Philips Factory Service of Florida
1911 US Highway 301 North
Tampa, FL 33619
(813) 621-8181

WESTERN U.S.A.

Philips Factory Service Western Region
681 East Brokaw Rd.
San Jose, CA 95112
(408) 436-8566

NORTH CAROLINA

Philips Factory Service of N. Carolina
520 G Clanton Rd.
Charlotte, NC 28217
(704) 529-6330

TEXAS

Philips Factory Service of Texas
1110 N. Post Oak Rd., Suite 100
Houston, TX 77055
(713) 682-3990

CENTRAL U.S.A.

Philips Factory Service Central US
950 Buttonnote Circle
Brooklyn Heights, OH 44131
(216) 741-3334

MICHIGAN

Philips Factory Service of Michigan
25173 Dequindre
Madison Heights, MI 48071
(248) 544-2110

DALLAS AREA

Philips Factory Service of Dallas
415 N. Main Street, #107
Euless, TX 76040
(713) 682-3990

ILLINOIS

Philips Factory Service of Illinois
1279 W. Hamilton Pkwy.
Itasca, IL 60143
(630) 775-0990

TENNESSEE

Philips Factory Service of East Tennessee
6700 D Papermill Rd.
Knoxville, TN 37919
(423) 584-6614

MID-ATLANTIC

Philips Factory Service Mid-Atlantic
352 Dunks Ferry Rd.
Bensalem, PA 19020
(215) 638-7500

LIMITED WARRANTY

One Year Free Labor

One Year Free Service on Parts

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter, all parts will be repaired or replaced and labor is free. After one year from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges. All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product used for commercial or institutional purposes.

WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP ...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE ...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE....

Repair must be performed by an authorized service center or a factory service center. If you do not live near a factory service center, contact your dealer. If your dealer is an authorized service center, he will arrange repair. If your dealer is not an authorized service center he will direct you to the authorized service center engaged by him to service the products he sells.

(In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

IF YOU HAVE QUESTIONS IN CANADA

Please contact Philips at:

1-800-661-6162 (French speaking)
1-800-363-7278 (English speaking)

REMEMBER...

Please record the model and serial numbers found on the product below. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL # _____

SERIAL # _____

This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.

Philips Service Company, P.O. Box 2976, Longview, Texas 75606 (903) 242-4800.



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